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ABSTRACT

This report provides an analysis of the Alberta, Canada population on both a regional and provincial basis, and develops enrollment projects for the provincial system of nonuniversity postsecondary and continuing education. The projections were developed using a pool method of projection whereby the pool of potential students was determined by subtracting projected first and second year university enrollments from the total number of grade twelve students qualified for the first two years of postsecondary education. The pool was enlarged by adding potential adult students drawn from older age groups. A 28-item bibliography and appendices of statistical data are included. (Author/MJM)

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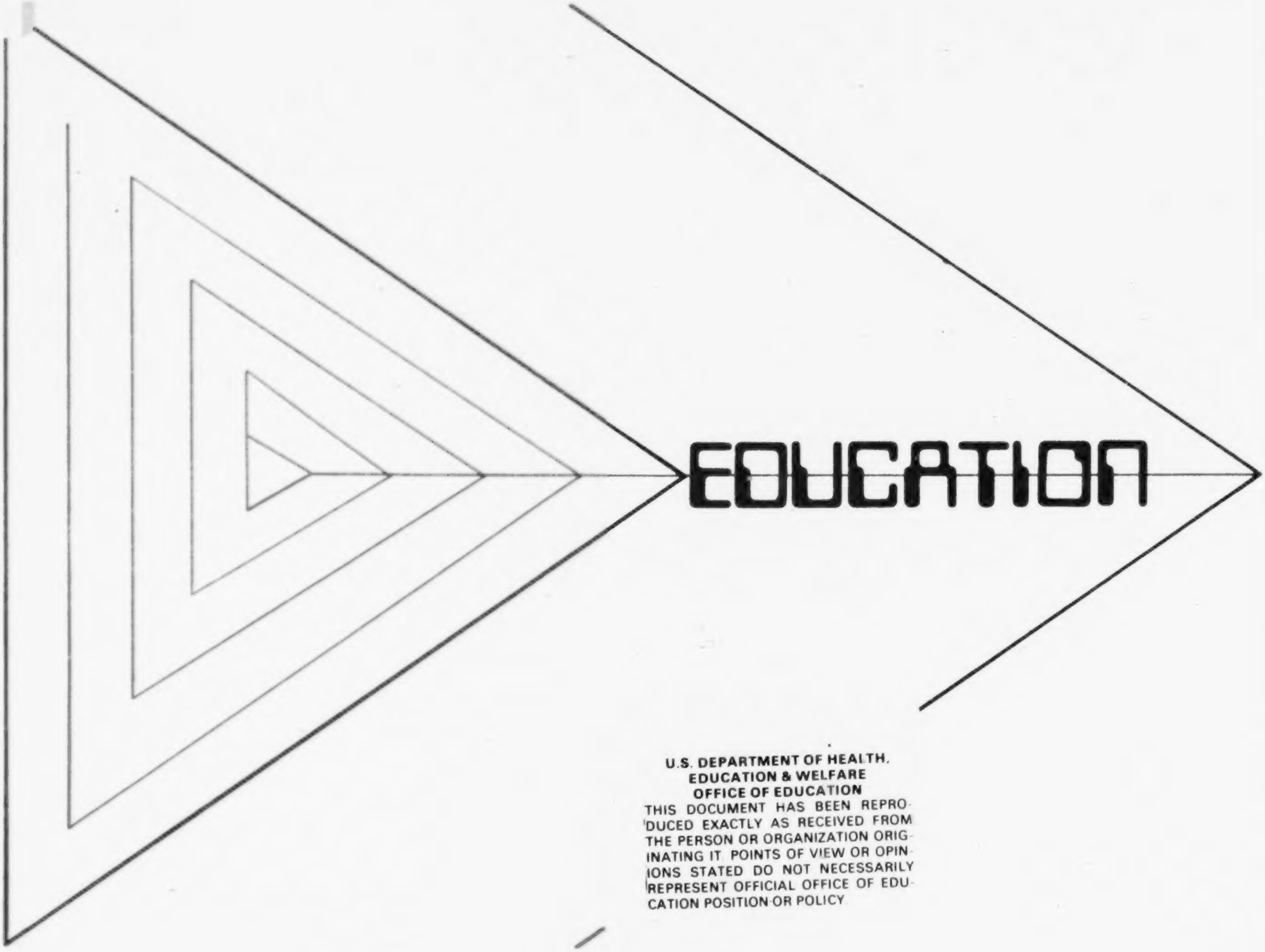
MASTER PLANNING MONOGRAPH 4

Enrolment Potential

Population Analyses and Projections for Alberta Post-Secondary Education



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July 1971
Alberta Colleges Commission

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MASTER PLANNING MONOGRAPH #4

ENROLMENT POTENTIAL

POPULATION ANALYSIS AND PROJECTIONS FOR ALBERTA POST-SECONDARY EDUCATION

Conducted By

NEIL W. J. CLARKE

For The

ALBERTA COLLEGES COMMISSION

September, 1971

FOREWORD

Master Planning Monograph 4 provides an analysis of the Alberta population on both a regional and provincial basis, and develops enrolment projections for the provincial system of non-university post-secondary and continuing education.

The projections were developed using a pool method of projection whereby the pool of potential students was determined by subtracting projected first and second year university enrolments from the total number of grade twelve students qualified for the first two years of post-secondary education. The pool was enlarged by adding potential adult students drawn from older age groups.

Since university enrolments during the past two years appear to be leveling off, the accuracy of projections based on the pool method may be questionable. However, if university enrolments continue to fall below projected figures, the pool of potential non-university students is increased. Furthermore, if the potential university students who do not register in university programs perceive college and other non-university educational programs as desirable alternatives, the projections contained in this monograph may be quite conservative.

The study forms a part of the Alberta Colleges Commission master planning project, and its findings will be used in developing a master plan for non-university post-secondary and continuing education in the Province of Alberta. The findings of this study should also prove useful to policy makes, planners and post-secondary education institutions in Alberta and elsewhere in Canada.

R. A. Bosetti,
Director of Planning & Research.

ACKNOWLEDGEMENTS

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NWJC, October, 1971

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SUMMARY CHAPTER

INTRODUCTION

This chapter replaces a final chapter of the type usually found at the end of a research report. The purpose of this chapter is to fulfill a need often neglected by concluding chapters: the need to summarize concisely yet in some detail the methodologies, findings and implications of a study.

Therefore, the summary chapter will attempt to provide such a summary under the following topics: purpose of the study; related literature; college projections, methods, assumptions and comments on the methodologies; necessary data for improved methodology; summary of projections; and, comments on the appendices.

PURPOSE OF THE STUDY

Ultimately, projections of part-time plus full-time enrolments and of extension enrolments for 1976-77 and 1981-82 were required for the following: the provincial system of non-university post-secondary and continuing education, (the "college educational system"), specific provincial subsystems of college education, each of eight discrete provincial college regions; and (full-time plus part-time only) enrolments in selected individual colleges or programs in each region.

RELATED LITERATURE

The literature on college enrolments in Alberta was sparse, particularly if non-university post-secondary and continuing education is to be studied as a system in the environment of Alberta education and the Alberta society. The only generalization located was that there will be nearly 300,000 students in the college system by the year 2000; this figure represents an approximate full-time equivalent enrolment of 75,000. According to the present study, the total system enrolment will be about 293,000 of which 74,000 are full-time or part-time students.

METHODOLOGIES AND ASSUMPTIONS

The study was unique in approaching the enrolment projection problem in terms of provincial non-university post-secondary and continuing education as a *system*. This approach, however, required new methodologies, adaptations of previously used methodologies, and the acceptance of a set of assumptions associated with each.

System Enrolment Projections

Method. Provincial full-time, part-time, extension, and very short course enrolments were projected by:

1. Determining for each projection year a net grade 12 pool by subtracting the number of first- and second-year university students from the total number of grade 12 students available for the first two years of university in a given year. Grade 12 enrolments were predicted

for a short term by projecting the cohort survival rate through elementary-secondary school and applying it to actual grade one enrolments. Longer range grade 12 projections were made by examining the changing percentage which grade 12 students were of the 18-year-old age group in the population over a period of years.

2. Determining what portion of the net pool would actually enter the college system; this was done by examining historical situations and by speculating upon the role of college education in the future.

3. Determining how many adults from older age groups would return to the college systems.

4. Combining the results of the first three steps.

Assumptions. The following assumptions were stated or implicit in the methods for projecting system enrolments:

1. Full-time*, part-time*, and extension* enrolments can be projected with useful results; it was deemed both impossible and inappropriate to project enrolments in very short courses.

2. Certain identifiable relationships exist among college enrolments at the system and regional levels, the Alberta population, and the demand for college education; these suggest that college enrolments for the system will continue to grow at least until the turn of the century.

3. Current mathematical relationships among full-time enrolments, part-time enrolments, and full-time equivalent enrolments will approximate

---

*As defined in Chapter 1.

corresponding relationships in projection years.

4. Base data on college enrolments and "low" university enrolment projections are reasonably accurate.

5. A major pool from which college enrolments are drawn is the pool of students completing grade 12.

6. Nearly everyone who enrolled in grade one in 1970-71 will complete grade 12 in eleven years or soon after.

7. About 90 percent of Alberta eighteen year-olds in 1980-81 will complete two or more years of university or college education.

8. Approximations of subsystem enrolments can be obtained by applying system rates of increases to base-year subsytem enrolments.

9. The availability of physical facilities will not severely hinder colleges' ability to meet student demands for educational places.

Regional Enrolment Projections

Method. Wherever possible, data on each region which were parallel to those used for system-wide projections were identified so that the methodologies used to prepare provincial enrolments were applicable. Since this was not always possible, the following changes in the methodologies described above were adopted:

1. Beyond 1980-81, grade 12 enrolments were projected as a percentage of the total, rather than the 18 year-old regional populations.

2. Second-year university enrolments were estimated from

first-year enrolments on the basis of the provincial rate of retention of first-year students in the second year.

Assumptions. Those which were listed under provincial methodologies, numbers 1, 2, 4, 5, 6, 8, 9, and the following were required:

1. The differences between regional total populations and age 18 populations will not unduly reduce the extent to which enrolment projections approximate future reality.

2. Future enrolments in regional colleges and college programs can be approximated by applying rates of change in regional enrolments to base data on colleges and programs.

3. Full-time and part-time enrolments calculated solely on the basis of the grade 12 pool (rather than on the combined basis of grade 12 pool and 25-39 year old pool as in the case of system predictions) will yield a sufficiently accurate approximation of the system methodology.

4. (Except as noted in Chapter 3*), colleges and college programs will continue to be discrete organizations in which any enrolment increase will be due largely to additional program offerings and/or to increases in the size of extant programs to accommodate increasing student demands.

5. Regional university projections already account for changing patterns of demands for college education in the future.

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*E.g. AVC, Calgary may become part of Mount Royal College before 1976-77 (this study, page 78).

Retrospective Comments on the Methodology

Data. The methodologies used in this study require fairly precise data on past and present enrolments in colleges, college programs, public schools, and universities--not only in terms of system totals, by subsystems, regions, and individual institutions. Moreover, these data must be comparable over time and for all subsystems and colleges. Third, numbers of persons and numbers of students must be supplemented by age distributions and, to an extent, by mobility patterns within provincial and regional populations. Some examples of the reasons for this are as follows: (1) projections by subsystems, regions, and institutions in addition to by system are required, (2) in order to determine what percentages of students in various pools will actually enrol in the college system requires the projection of historical enrolments calculated as percentages of pools in corresponding years, (3) discrete pools of adults likely will not reliably project adult portions of enrolments unless detailed information on the age distribution of (a) students in all college programs, and (b) the regional as well as the provincial populations are known, and (4) regional university enrolments are defined in terms of the place (region) where students completed high school before going to one of the Alberta universities.

The grade 12 pool. In the recent past, the rapidly increasing survival rate of the grade one cohort by the time it reached grade 12 was of crucial importance in projecting the size of the grade 12 pool. It seems clear from this research that the retention rate in all regions will peak at about 110 percent as (1) the "real" retention rate approaches 100 percent and (consequently) (2) as the number of adults returning to grade 12, who inflate the observed "retention" rate, diminishes. In the regions containing large urban centers, this phenomonen will likely occur before 1980. There are two consequences: (1) the precision lent to projections by considerations of cohort survival will become superfluous when demographic data on both college enrolments and regional populations become available--as they will in the next five years; (2) because 18-24 and 25-39 year-old pools of students will become much more discrete (due to the decreasing participation in the high school pool by older adult students), projections of the size of various age-group pools and of the participation rate of these in the college system will provide a simpler but accurate methodology for projecting enrolments. The significance of such a method emerges when one considers the characteristics of a variety of adult pools in terms of full-time and continuing educational needs (see Table A-25 which delineates age groups in the population according to work and education "tasks").

The present study. The timing of this study was such that the advantages from using the cohort survival method were beginning to diminish and those of using somewhat discrete age-group pools could have been profitably exploited. However, as was mentioned several times, appropriate data on the regional demographies and on college students in past years were unavailable--and in many cases virtually non-existent with the notable exceptions of the A.B.S. population projections (1971) and the student characteristics studies completed for (unfortunately only a few) Alberta colleges (Letts, 1968; Schindelka, 1968; Letts, 1969; Alberta Department of Labour, 1971). It is important to note that although the next three chapters seem to suggest that age-specific pools could have been delineated, the high school pool included different--and unspecifiable--proportions of students 20 years of age or older every year until at least 1979 or 1980.

Recommendation. In view of the above, any anticipated revision of enrolment projections for the college system should be planned such that demographic data on students, and on regional and provincial populations will be available in the forms indicated in this section.

SUMMARY OF PROJECTIONS

Projections of college enrolments for the academic year 1976-77 and 1981-82 have been abstracted in Tables S-1 and S-2 and Figures 1, 2, 3, and 4 from Chapters 2 and 3. In some cases, 1986-87 and 2001-02 figures are included; but these projections should be used with extreme caution.

Table S-1

Summary of College Enrolment Projections by System, Subsystems, Regions, and Institutions

		Actual x 1000	Projected Enrolments* x 1000			
		1970-71	1976-77	1981-82	1986-87	2001-02
+I. Alberta College System [9][1]	FT + PT[2]	29.0	61.9	73.1	62.2	74.4
	Ext.[3]	71.6	115.0	145.8	164.9	218.4
	Total[4]	100.6	176.9	218.9	227.1	292.8
+A. Public College Subsystem [10]	FT + PT	5.7	12.2	14.4		
	Ext.	2.5	5.7	7.2		
	Total	9.2	17.9	21.6		
B. Subsystem of Institutes of Technology [10]	FT + PT	6.7	13.9	20.0		
	Ext.	17.2	24.6	28.0		
	Total	23.9	38.5	48.0		
C. Subsystem of Agricultural Colleges [10]	FT + PT	.6	1.4	1.6		
D. Apprenticeship [10]	Total	9.2	19.8	23.3		
E. Remaining in the system are hospital-based nursing programs, Various adult vocational training programs, and various agenices offering extension [A-16]						

Continued...

*Assumes that subsystems will continue unchanged in terms of any reshuffling of sub-system components.

[1] Number in bracket indicates the Table in this study from which projections were abstracted.

[2] Full-time plus Part-time (head count). [3] Extension (head count).

[4] Sum of FT + PT and Ext. (error due to rounding). +See Table S-2 for yearly projections.

Table S-1 (Continued)

		Actual x 1000	Projected Enrolments x 1000			
		1970–71	1976–77	1981–82	1986–87	2001–02
II. Eight College Regions [28]	TOTAL FT + PT		55.6	63.2		108.9
	TOTAL EXT.		116.9	149.5		208.1
	GRAND TOTAL		172.6	212.7		316.9
A. Edmonton Region (Total) [28]	FT + PT		25.4	28.1		44.8
	Ext.		53.0	68.6		92.3
	Total		78.4	96.7		137.1
1. Grant MacEwan College (includes AVC & Nursing) [29]	FT + PT	2.7	5.6	6.1		9.8
2. NAIT [29]		3.5	7.0	7.7		12.4
B. Medicine Hat Region (Total) [28]	FT + PT		1.6	1.7		1.8
	Ext.		1.3	3.6		3.6
	Total		4.7	5.4		5.4
1. Medicine Hat College (includes Nursing) [30]		.7	1.1	1.2		1.3
C. Lethbridge Region (Total) [28]	FT + PT		2.4	2.3		0.9
	Ext.		7.5	9.0		10.4
	Total		9.9	11.3		11.3
1. Lethbridge Community College (includes Nursing) [31]	FT + PT	1.2	1.5	1.4		.6

Continued...

Table S-1 (Continued)

		Actual x 1000	Projected Enrolments x 1000			
		1970-71	1976-77	1981-82	1986-87	2001-02
II. Continued:						
D. Calgary Region (Total [28]	FT + PT		19.6	22.7		48.8
	Ext.		36.7	47.7		74.7
	Total		56.3	70.4		123.5
1. Mount Royal College (includes AVC, Nursing) [32]	FT + PT	4.6	8.6	10.0		21.4
2. SAIT [32]	FT + PT	2.3	4.4	5.1		10.9
3. Olds Agricultural College [32]	FT + PT	0.4	0.7	0.8		1.7
E. Red Deer Region (Total) [28]	FT + PT		2.6	2.7		4.2
	Ext.		7.3	9.3		12.6
	Total		9.9	12.0		16.8
1. Red Deer College (includes Nursing) [33]	FT + PT	0.8	1.3	1.4		2.2
F. Grande Prairie Region (Total) [28]	FT + PT		2.5	3.3		5.5
	Ext.		4.0	5.0		7.4
	Total		6.5	8.3		12.8
1. Grande Prairie College [34]	FT + PT	0.5	1.4	1.7		2.9
2. AVC, Grouard [34]	FT + PT	0.2	0.4	0.5		0.9

Continued...

Table S-1 (Continued)

		Actual x 1000	Projected Enrolments x 1000			
		1970-71	1976-77	1981-82	1986-87	2001-02
II. Continued:						
G. Vermilion Region (Total) [28]	FT + PT		0.9	1.1		0.9
	Ext.		2.9	3.2		2.8
	Total		3.8	4.3		3.7
1. Vermilion Agricultural College [35]	FT + PT	0.2	0.4	0.4		0.5
H. Fairview Agricultural College [28]	FT + PT	0.1	0.2	0.5		0.6
		1971-72	1976-77	1981-82		2001-02
III. Alberta Population		1,608	1,780	1,981		2,928
A. Edmonton Region		732	815	927		1,300
B. Medicine Hat Region		47	48	49		48
C. Lethbridge Region		112	116	122		127
D. Calgary Region		494	565	645		996
E. Red Deer Region		106	113	126		168
F. Grande Prairie Region		54	61	68		98
G. Vermilion Region		44	44	43		37
H. Fairview Region [11]		33	37	41		59

Table S-2

Summary of College System and Public College Subsystem
Full-Time Plus Part-Time Enrolment Projections

Year	Enrolments Total System[1]	 Public Colleges[2]	 Public College Including AVCs & Nursing[3]
1970-71 (actual)	28,950	5,703	5,703
1971-72	34,442		6,500*
1972-73	40,076		8,000*
1973-74	45,556		10,000*
1974-75	49,681		13,000*
1975-76	56,113		16,000*
1976-77	61,906	12,204	19,438
1977-78	65,629		19,900*
1978-79	68,553		20,400*
1979-80	70,100		20,900*
1980-81	71,720		21,400*
1981-82	73,083	14,401	21,859*
1982-83	72,000*		
1983-84	70,000*		
1984-85	67,000*		
1985-86	64,500*		
1986-87	62,182		

[1] Source: Table 9.

[2] Source: Table 10. *Excludes* nursing programs and AVCs.

[3] Source: Tables 29 to 36. AVC and nursing enrolments in the six public college cities are blended in after 1976.

*Interpolated.

Figure 1

Participation Rates in the Alberta College System

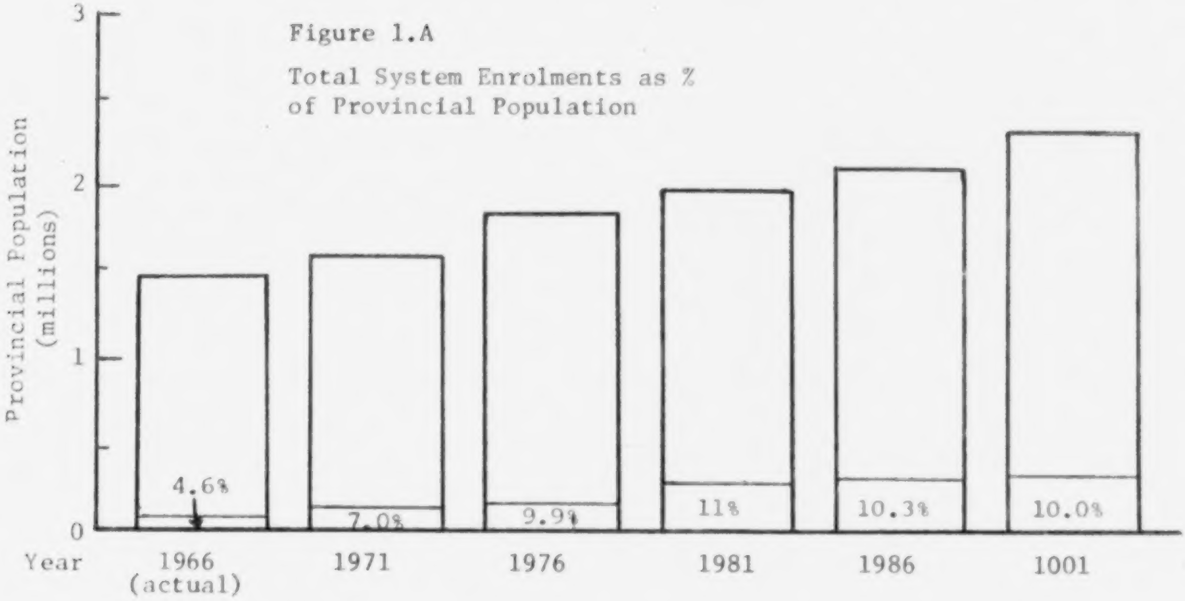


Figure 1.A

Total System Enrolments as % of Provincial Population

Source: Table 9.

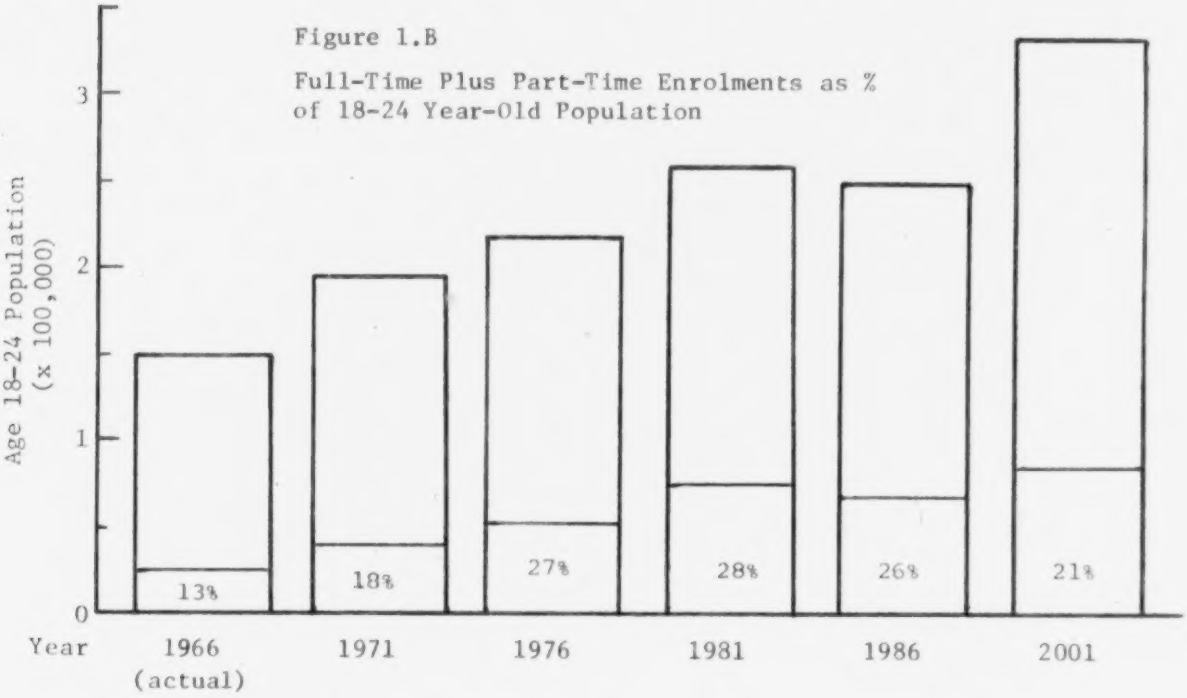


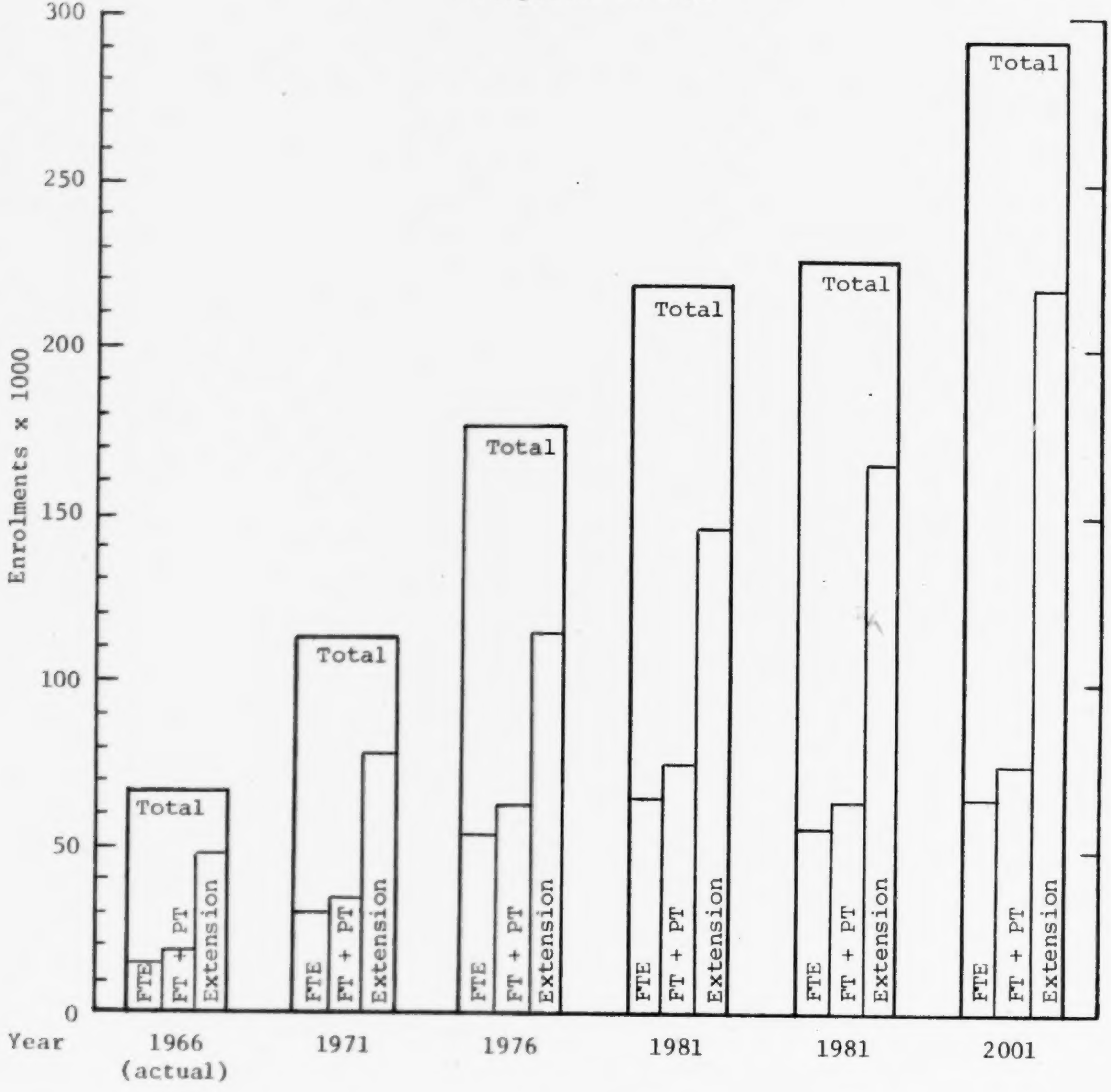
Figure 1.B

Full-Time Plus Part-Time Enrolments as % of 18-24 Year-Old Population

Source: Table 9.

Figure 2

College System Enrolments* in Alberta
Projected to 2001

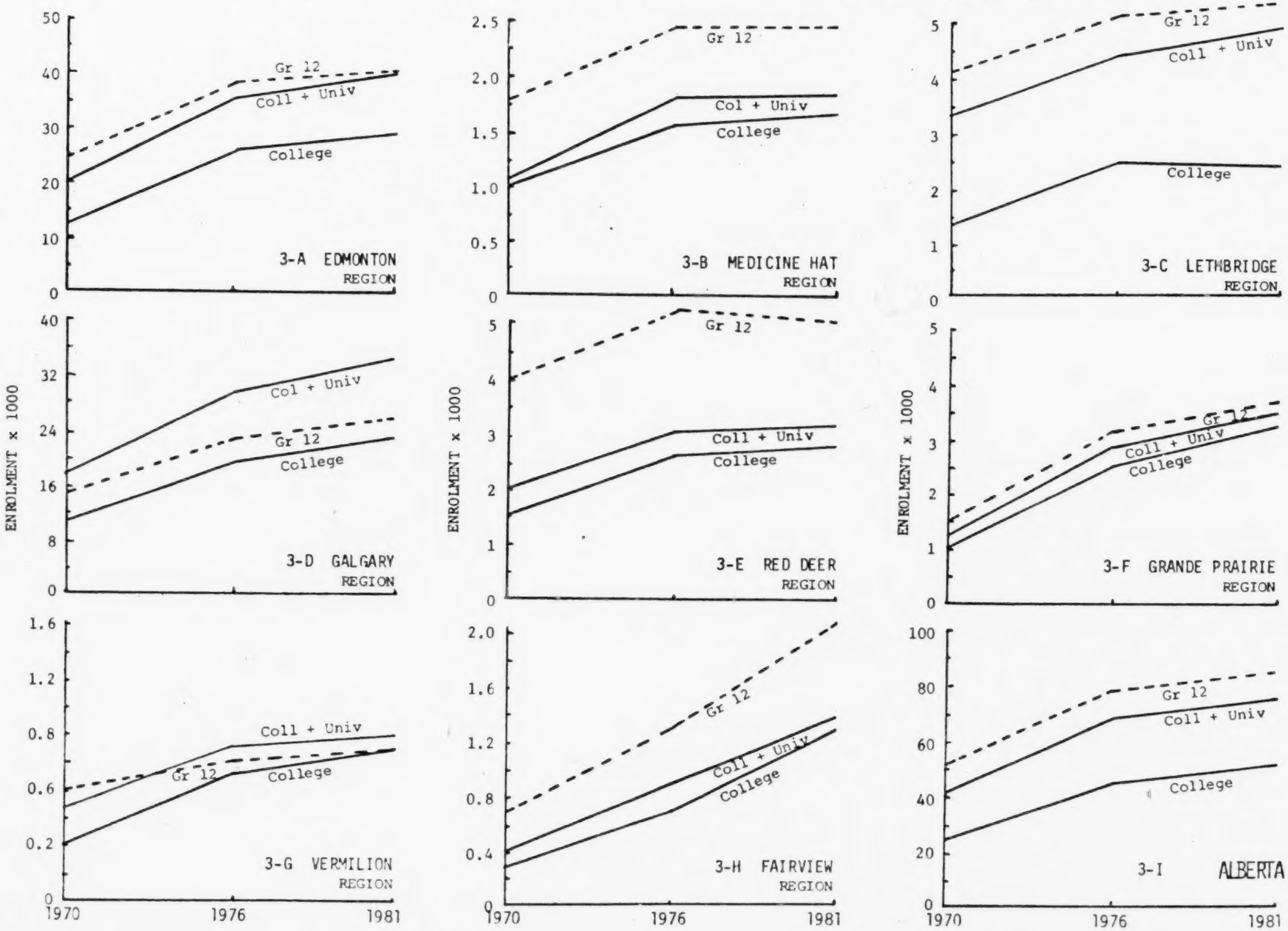


Source: Table 9.

*FT + PT is full-time headcounts plus part-time headcounts.
(Note: FT + PT + Ext. = Total).

Figure 3*

Disaggregation of Grade 12 Pool into First- and Second-Year College[1] and University[2] Enrolments



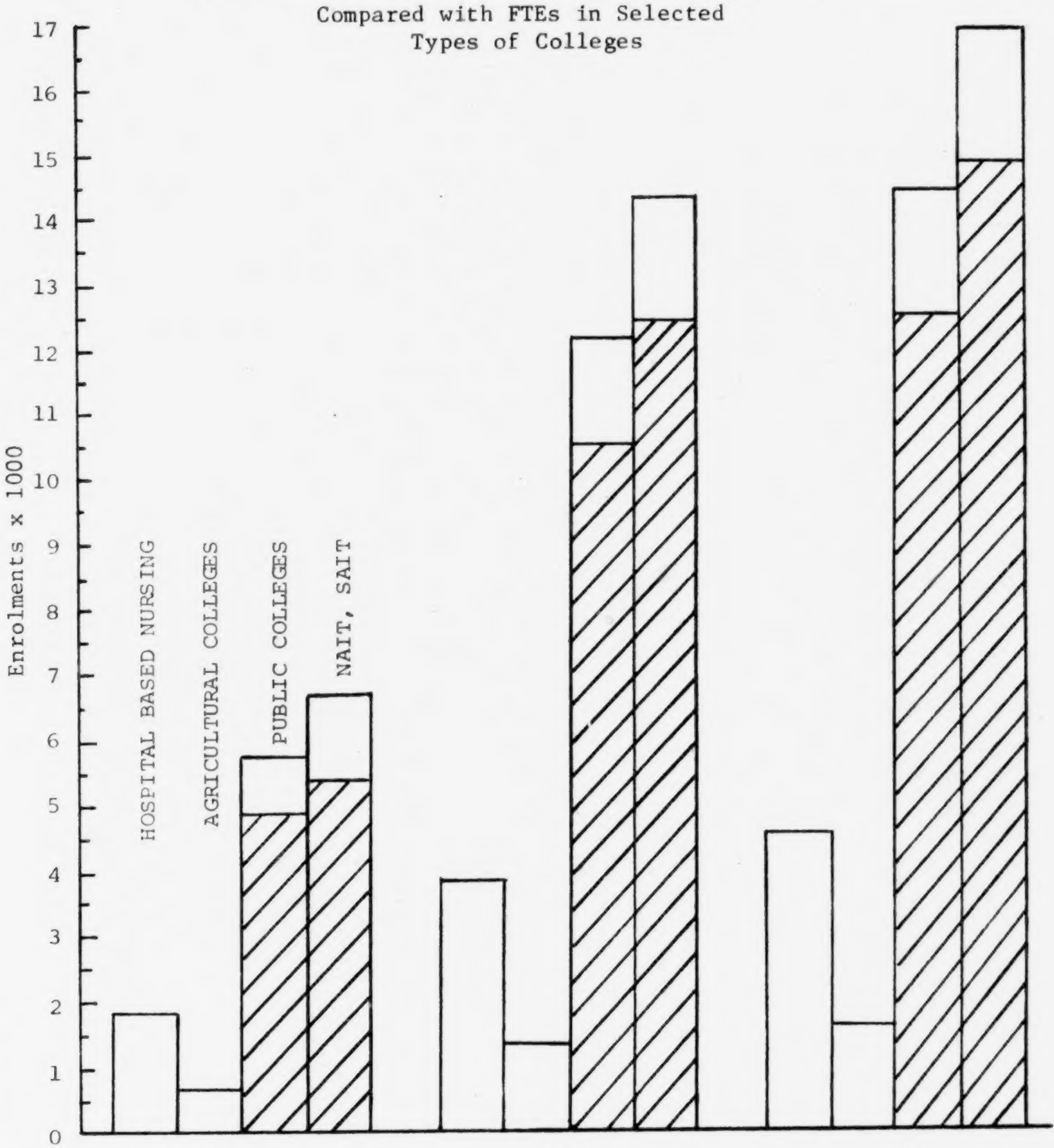
[1] Full-time and part-time college enrolments.

[2] First- and second-year university enrolments (full-time).

*Note that scales are not equal on all graphs.

Figure 4

Full-Time Plus Part-Time Enrolment* Projections Compared with FTEs in Selected Types of Colleges



*Full height of bars represent full-time plus part-time enrolments; shaded segments represent FTEs. (See pages 9 and 26 for discussion of full-time equivalents).

Source: Table 10.

The Appendices

Together with the tables in the study, those in the appendices provide in great detail the raw data, intermediate data, and related data used in this study. The appendices are included so that virtually all input data are available to critics and to other researchers who may wish to apply or to develop alternative methodologies.

A Plea for Criticism

Although the aggregated projections for the system and the eight college regions seem useful, some of the more disaggregate projections may be open to criticism because of the restrictions imposed by the data, the methodologies, and the associated assumptions. Because of this, because of the suggested development of a "purer" pool based methodology, and because still other methodologies may present themselves, both the writer and the Alberta Colleges Commission request criticisms, suggestions, and comment from all interested readers.

The nature of the master plan to which this study was intended to provide input is cyclic and requires a regular reappraisal of the plan itself and the several input studies; therefore, criticisms will prove to be more than academic exercise since they will be examined before enrolment projection figures used to plan for the college system are updated.

Chapter 1

INTRODUCTION

The purpose of this study was to project enrolments in the post-secondary non-university and continuing educational system in Alberta. Projections were made from historical data and analysis of the role of post-secondary education in the future. Presently, the system provides educational programs and services for students both young and old who have passed out of the secondary phase of education, but who have not sought post-high-school training in a university.

Although it was necessary to impose a few limitations on the scope of those persons who might be defined as "post-secondary non-university and continuing education students," this study attempted to account for virtually all categories of students who typically avail themselves of programs in all public sectors of this educational phase; in addition, some students in proprietory schools and in on-the-job training programs were taken into account. The precise scope of the study will be discussed later.

An underlying assumption of this study is that enrolments and changes in enrolments are intimately related in some fashion to population and to population changes, and to socio-economic features of the geographical location of a population. Since these relationships are seldon linear, one objective of this research was to discover--or at least to hypothesize--the nature of such relationships.

NEED FOR THE STUDY

The need for projecting enrolments in educational institutions reflects the need which is more and more recognized for educational planning, educational efficiency, and educational accountability. In describing a planning project, the Colleges Commission (1971: 1) stated that

> The public educational system is being forced to recognize the values of long-range planning by public demands for increased services at a time of rapidly escalating educational costs.

Second, it is important to examine post-secondary education in the non-university sector as a system because of the broad spectrum of programs and services to be found in colleges and institutes of technology. Accountability becomes a particularly significant problem when services are unnecessarily duplicated or when educational needs are inadvertently overlooked. To consider enrolments in light of the entire population of the province seemed to be one means of systematizing planning and of emphasizing the need for coordination of endeavors in non-university post-secondary and continuing education.

Third, the Public College System is really only two years old; rapid changes in technology have forced the Institutes of Technology to remain young because new problems cannot always be solved by last year's methods. Both youth and rapid change emphasize the need for planning.

> Some type of master plan [is] needed not only to avoid the unnecessary duplication of programs and the unhealthy competition among institutions, but to promote . . . orderly growth of programs at institutions where they are most needed (Alberta Colleges Commission, 1971: 6).

It was expressly for the purpose of developing a master plan for post-secondary non-university and continuing education in Alberta that this population and enrolment study was undertaken (see preface). Within the design for the master plan are the following specifications for an enrolment study:

> Problem 1. to describe the population pool by province and by college regions as a basis for projecting enrolments in Alberta Public Colleges.*
>
> Resultant Data. potential enrolments and projected enrolments by province, and by college regions.
>
> Possible Methods. demographic survey; review of literature on projections and data concerning educational enrolments in Alberta (Master Plan Committee, 1970: 1).

STATEMENT OF THE PROBLEM

Specifically, the problems to which this study directed itself were

1. to examine the total population of Alberta and some characteristics of it.

2. to predict total college system enrolments in Alberta for 1976, 1981, 1986, and 2001.

3. to predict total enrolments in three subsystems which are more or less province wide: public colleges, agricultural colleges, and the institutes of technology.

4. to predict regional enrolments in the college system for 1976, 1981, and 2001.

5. to predict enrolments of each college in the post-secondary non-university educational system in 1976 and 1981.

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*Definition of Public Colleges on page 10.

6. to predict enrolments in non-institutionalized sectors of the post-secondary non-university and continuing educational system in 1976, 1981, and 2001: apprenticeship enrolments, extension enrolments, upgrading enrolments, and continuing education enrolments.

7. to examine the total populations of eight college regions in Alberta, and to compile a variety of types of demographic and enrolment data pertinent to tackling the above problems.

More generally, historical population statistics and enrolment data were gathered and used to project provincial and regional populations, and to project provincial, regional, and institutional enrolments. These projections were evaluated and adjusted where necessary in view of projections prepared by other agencies, and in view of pertinent socio-economic data. In a few cases sets of alternative projections from other sources were reported for the sake of comparison.

SCOPE

This study did not account for students (or populations) outside of Alberta, or for enrolments in proprietory schools, correctional institutes, non-formalized or non-institutionalized programs except as specifically noted in subsequent chapters. No attempt was made to provide detailed projections of enrolments in elementary, secondary or university educational programs other than to report selected statistics from the Department of Education and the Alberta Universities Commission.

Specifically, population statistics and enrolments were examined and reported, and projected with respect to the following delimitations.

Province of Alberta Population

1. Historical population figures were compiled from various sources and presented.

2. Projections prepared by various agencies and by the author were compiled and compared.

College Region Populations*

1. Historical population figures were calculated from detailed Province of Alberta census data.

2. Regional population projections were derived from various provincial projections by other agencies, and from historical population statistics concerning the eight regions.

3. Some socio-economic factors affecting regional populations in the future were considered.

College Enrolments

Historical. Enrolments from the following institutions were compiled:

(1) Public colleges. Medicine Hat, Lethbridge, Mount Royal (Calgary), Red Deer, and Grande Prairie. (Full-time, part-time, extension, and continuing education--head counts and full-time equivalents [F.T.E.'s].)

(2) Institutes of Technology. Northern Alberta Institute of

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*Discussion and description of eight college regions is found on page 86.

Technology (NAIT), Southern Alberta Institute of Technology (SAIT). (Full-time, extension, and correspondence--head counts.) Alberta Petroleum Industry Training Center (Edmonton). (Full-time enrolments.)

(3) Universities. University of Alberta (Edmonton), University of Calgary, and the University of Lethbridge. (First- and second-year, total undergraduate, total enrolments of full-time students, and extension enrolments.)

(4) Agricultural Colleges. Fairview Regional College, Vermilion Regional College, and Olds Regional College. (Full-time, extension, and short course head counts.)

(5) Alberta Vocational Training Centers. (Full-time enrolments.)

(6) Private colleges. Camrose Lutheran College, Concorida College (Edmonton), College St. Jean (Edmonton), Hillcrest Christian College (Medicine Hat), and Canadian Union College (Lacombe). (Full-time enrolments.)

(7) Licensed business and trade schools. (Proprietory Schools). (Full-time and part-time head counts.)

Current enrolments. 1970-71 enrolments in all of the above *as well as* in the following were determined. In most cases, figures were taken directly from Fisher (1971):

(8) hospital-based programs for nurses, aides, etc. (head counts),

(9) Hinton Forestry School (head counts),

(10) adult education offered by school boards (head counts),

(11) apprenticeship program (part-time head counts),

(12) programs for the rehabilitation of disabled persons (full-time plus part-time head counts), and

(13) recreational and community services programs (numbers of persons served).

Projection Period

Basically, the projection period was considered to be 1971 to 1986; however, projections were calculated or reported for 1976, 1981, and in many instances, projections to 2001 were prepared; in other cases only 1976-77 and 1981-82 projections were calculated. Projections beyond 1981 should be viewed only as rough approximations.

Finally, the nature of many extension programs and community service types of programs led to a final delimitation.

If a college system is to be sensitive to the needs which society has for avocational pursuits, profitable expenditures of leisure time, and for recreational activities, the college will adapt to meeting these needs on short notice and in a creative manner. Regardless of the socio-economic status quo or trends, a successful community college will find ways of efficiently and effectively meeting demands by the community for a spectrum of non-credit programs.

For this reason, and because of the amount of speculation that would be required to predict the nature of courses and of students in short-term programs ten or fifteen years from now, the study was delimited to the analysis of full-time, part-time and longer term extension student enrolments. Moreover, it is likely that staff, procedures and facilities which exist for full-time and part-time students will be easily adaptable to fulfilling needs of other types of students as well.

This is not to say that past, current and future community service program enrolments will be completely ignored.

LIMITATIONS

In all cases, limitations associated with the reliability of data, the comparability of data, the availability of data, with the necessity to make assumptions, and with the accuracy with which projections can be made are listed and discussed in the text or in footnotes accompanying tables.

However, some general comments on the limitations of historical enrolment data are appropriate at this point.

Historical data do not always provide accurate reflections of trends because of lack of comparability: methods for counting students vary from institution to institution at any point in time, and from year to year--even in a single institution. When comparability of data seemed particularly doubtful, appropriate qualification of data in tables was noted.

Even where comparable data are available, there is often a problem in deciding which methods for counting students are most appropriate. Enrolments are computed in terms of (1) full-time students,

(2) full-time students plus full-time equivalent, (3) part-time student head counts, and (4) total student contacts irrespective of the duration of contact in hours, weeks, months, or years. From one point of view, it seems most desirable to speak of enrolments in terms of the numbers of Albertan who are served in some manner by the system of non-university post-secondary and continuing education. For other purposes, it is often desirable to convert gross head count tallies to full-time equivalents according to some formula; for example, in projecting operating costs and capital requirements in post-secondary education, full-time equivalent counts may be preferable to head counts. However, developing a formula for converting head counts to full-time equivalents is difficult for each type of institution--not to mention for the range of types of institutions with which the present study was concerned. The decision was to work in terms of numbers of persons served wherever possible, with these persons being classified as full-time, part-time or extension, or "one-shot." Planners concerned with numbers of student places and with various types of unit costs can apply their full-time equivalent formulas in order to utilize the findings of this study.

DEFINITIONS

1. College System. Mainly for the convenience of avoiding repetition of the term "non-university post-secondary and continuing educational system," the latter was abbreviated as *college system* for the purposes of this study.

2. College. Accordingly, a college was defined as any institution offering programs or services within the college system.

3. Community College. This is a *public* institution which is also a *college* according to the above definitions. In Alberta, the community colleges comprise the Public Colleges, two Institutes of Technology, three Regional Agricultural Colleges, the Alberta Vocational Centers, and the Hinton Forestry School.

4. Enrolment. Technically an enrolment is a list of persons who are registered in a club, institution, or as part of any group which has formed for at least one common purpose. In education, the term enrolment has become accepted as referring to the *number* of persons on a roll as well as the list of their names. In this study, then, enrolments referred to the numbers of persons having availed themselves--in a manner prescribed or accepted by a college--of one or more service units offered by some sector of the college system.

5. Student. A student is one of those persons enrolled in a college program and thereby included in the *enrolment*. (In some cases

where F.T.E.'s have been included in enrolment figures, this definition will not hold; this was discussed on page 9, above).

6. Non-University Post-Secondary and Continuing Education. No explicit definition of this term is required; for the purposes of this study this sector of education has been delimited as comprising the programs and services offered by a selected set of agencies and authorities which were listed on pages 5, 6, and 7.

7. Programs and Services. These refer to one or more courses, classes, series of classes, lectures, demonstrations--or one or more of all intentional experiences devised by colleges on behalf of persons enrolled.

8. College Regions. (The discussion of college regions in a later chapter provides an operational definition of this term which is adequate for the purposes of this study).

9. Full-time students, part-time students, and extension students. Precise definitions of these terms are difficult to develop to the satisfaction of a large number of persons. Nevertheless, in order to make some sense of the various types of programs in which college students enroll, some mention of full-time, part-time, and extension was required. (1) Full-time students engage in largely formalized educational activities for several hours a day, most days of the week for at least six or seven months of the year for the purpose of completing full one- or two-year programs; (2) part-time students also seek

certificates or diplomas, but over a longer total period of time. They may work half days and attend classes half days or during late afternoons and evenings; and (3) Extension students usually enroll in late afternoon or evening programs on a regular basis--once or twice a week--for perhaps one to six months. Such programs are not for credit toward full one- or two-year certificates or diplomas, although some type of certificate may be awarded. These distinctions are intentionally fuzzy so that some flexibility is built in. However, they do tend to indicate a further important distinction between "extension" programs and very short-term or single-contact educational experiences such as four lessons in basket-weaving, a field day at which farmers learn valuable things about new machinery or livestock breeding, a teacher in a two-day in-service workshop, and so on. Some of these are referred to as community services as well as "very short term" programs. Both short-term and extension programs are part of the broader field, continuing education.

10. Subsystem. In the provincial system defined above are sets of college institutions and/or programs which cover the entire system geographically or which cover only a little more than the geographical area of a single region. (Regions are in fact another type of subsystem). Since a precise definition is complex, it is more convenient to specify the subsystems referred to in this study: Public colleges, institutes of technology, agricultural colleges, all extension programs, all apprenticeship, and all hospital based schools of nursing.

METHODOLOGY

Since data collection methods and projection techniques varied from one part of the study to others, they are discussed individually at appropriate places in the text.

Chapter 2

THE ALBERTA POPULATION AND EDUCATIONAL ENROLMENTS

Both historical and current trends in elementary, secondary, and post-secondary educational enrolments can be shown to be related to past and present changes in the size and in the age distribution of the total provincial population. If it is assumed that a similar relationship will continue to exist and if some determinants of the nature of the future population can be speculated upon with a degree of confidence, then the size and other charactertistics of future enrolments should be predictable.

THE POPULATION OF ALBERTA

Since the first problem to which this study was directed was predicting the total enrolment of the college system in 1976, in 1981, in 1986, and in 2001, it seems appropriate first to examine some projections of the total population of Alberta for the period 1971 to 2001. The next sections briefly explain and compare projections which have been prepared by the following: The Provincial Planning Branch of the Alberta Department of Municipal Affairs (1967); The Alberta Bureau of Statistics (1971); and The Oil and Gas Conservation Board (O.G.C.B.) (1970).

Projections of the Provincial Planning Branch

Although the Branch's projections were made nearly four years ago, and although they do not go beyond 1981, these predictions are reported in the present study because of the detailed manner in which they were prepared. Every city, town, village; every rural unicorporated authority; every census division; and every Indian reserve was treated separately. Not only could the hundreds of individual projections be combined to produce provincial projections, but also the various predictions could be reaggregated in such a manner that the populations of eight college regions in Alberta could be projected. As will become evident in a later chapter, college region populations are important when enrolments of institutions in various locations throughout the province are projected.

Assumptions. The population projections reported in *Population 1--Trends* (1967) are based solely on past trends; thus, birth, death, and net migration rates were accounted for in an implicit manner, only.

Adaptations. The Planning Branch was more concerned with population trends than with periodic projection figures; the latter were provided only for 1981. In order to supplement this for the purposes of the present study, Planning Branch estimates of the 1971 populations of cities, towns, villages, and rural authorities are included in Tables 1, A-1 to A-8, and A-9.

Methodology. A long-term average trend (1951 to 1966) was combined with a short-term average trend (1961 to 1966) to obtain 1971 projections. Long-term average trends (1956-1971) and short-term average trends (1966 to 1971) produced 1976 figures. Similarly, 1961 to 1976 and 1971 to 1976 trends were combined to give the 1981 projections reported in *Trends 1* (1967).*

Projections. Table 1 shows that, according to projections calculated in the above manner, the total population of Alberta will be 1,976,620 in 1981.

The Alberta Bureau of Statistics

Data provided by A.B.S. were the detailed results of the application of their latest techniques to 1961 and 1966 Census of Canada population figures for Alberta. Five different projections--each based upon a different set of assumptions--were made for each year for every five year period 1971 to 1986. (On one of the sets of assumptions, the projections were extended to the year 2006).

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*For example, the 1971 population =

$$\frac{\frac{P_3 - P_1}{2} + \frac{P_3 - P_2}{1}}{2} + P_3,$$

where P_1 = the 1951 population;

where P_2 = the 1961 population; and

Where P_3 = the 1966 population (Provincial Planning Branch 1967: 1).

Table 1

Projections of the Alberta Population to 2001*

	SOURCES			
	Provincial Planning Branch[1]	Alberta Bureau of Statistics[2]	Alberta Bureau of Statistics[3]	Oil & Gas Conservation Board[4]
1961	1,331,944	1,331,944	1,331,944	1,331,900
1966	1,463,203	1,463,203	1,463,203	1,463,000
- - - -	- - - -	- - - -	- - - -	- - - -
1971	1,641,184	1,600,260	1,608,362	1,622,300
1976	(1,809,000)**	1,759,839	1,779,850	1,801,000
1981	1,976,620	1,946,625	1,980,841	2,001,300
1986	(2,145,000)	2,153,434	2,204,620	2,213,600
1991	(2,313,000)	(2,359,000)	2,434,632	2,426,500
1996	(2,481,000)	(2,565,000)	2,671,320	2,636,500
2001	(2,649,000)	(2,771,000)	2,927,687	2,845,000

*Actual populations are given above the dotted line.

[1] Provincial Planning Branch, Alberta Department of Municipal Affairs (1967).

[2] Alberta Bureau of Statistics: latest (August, 1971) calculations, "low more likely."

[3] A.B.S. (August, 1971), "high most likely" projections.

[4] Oil and Gas Conservation Board (1970).

**Figures in parentheses are interpolated.

Methodology and Assumptions. Computer programs were employed to calculate linear projections--one for each of the following sets of assumptions:

Projection 1:

Crude Birth Rate Estimates	
1967-70	.0200
1971-75	.0230
1976-77	.0240
1978-86	.0250

Projection 2-5: Age-Specific Fertility Rate Estimates

Age Group	#2 (low)	#3 (low more likely)	#4 (high more likely)	#5 (high)
15-19	.060	.060	.060	.060
20-24	.175	.200	.210	.225
25-29	.175	.175	.200	.225
30-34	.105	.105	.110	.140
35-39	.060	.060	.060	.075
40-44	.020	.020	.020	.020
45+	.002	.002	.002	.002

In addition, mortality rates data based on "Provincial and Regional Life Tables, 1960-1962 (D.B.S.)," base population data from the 1966 census, and an assumed net in-migration of 5,000 persons per annum were inputs to the computations of projections #3, #4, and #5.

Projections. The "low more likely," and the "high most likely" projection figures were included in Table 1. It is likely that there will be between 1,946,625 and 1,980,841 persons in Alberta in 1981; by 1986, there will be between 2.15 and 2.20 millions of persons in the province, according to A.B.S.

The Oil and Gas Conservation Board (O.G.C.B.)

The O.G.C.B. combined several components to develop a complex method for forecasting the population: (1) the rate at which the population has been maturing, (2) age-specific fertility rates, (3) age-specific mortality rates, (4) age-specific migratory tendencies, (5) sex-specific mortality rates, and (6) sex-specific migratory rates. Trends in these six determinants were established historically from the period 1956 to 1967. The mathematical model developed from these components and the assumptions which are required when the model is applied in order to forecast populations are discussed in "Alberta Population Projections 1966-1996," which is available from O.G.C.B.

The O.G.C.B. forecasts a population of approximately 2 million persons by 1981, and 2.2 millions by 1986. The 1981 figure is less than 1.5 percent higher than those of A.B.S., and less than 0.5 percent higher than that of the Planning Branch.

Preferred Projection of the Alberta Population

Since projections are so similar, it would be a superficial exercise to compute a "best fit" projection. It was easier to adopt one set as is, and which one to adopt was of little consequence; therefore, the A.B.S. "high more likely" projections will be used in the remainder of this paper because this set was extended to include the period 1968 to 2006, and also because it was the result of the most recent population analysis by A.B.S., which termed it "most likely."

THE ALBERTA POPULATION BY AGE AND SEX

More detailed information regarding the projected population of the province is provided in Table 2. These data were derived from the A.B.S. "high more likely predictions" (1971) as were the projections of the total population in the preceding section. The age groups reported were selected on the basis of "major tasks" of persons of various ages living in the 1971 Alberta culture. (See Table A-25).

During the next ten years, a major shift between the school-aged group (6-17 years) and the main college-aged group (18-24) will have occurred. The school age group which represented 26.5 percent of the total population will represent only 21.9 percent of the population by 1981, whereas the 18-24 year old group will increase from 11.8 to 13.1 percent of the total. Subsequently, the 6-17 age group will increase to about 23 percent by 1986 at which point it levels off until 2001. On the other hand, the 18-24 year group will drop sharply in 1986 (in absolute numbers, from 260 to 244 thousand, or from 13 to 11 percent of the total population); this group will decrease proportionately to 10.4 percent in 1991 after which time it will increase slowly to 11.8 percent in 2001.

Another important age group in terms of college enrolment, the 25 to 39 group, will increase in size from 18.6 percent of the total population in 1971 to 22.4 percent in 1986, and then decline to 19.8 percent in 2001. In terms of absolute members, every age group will double in size between 1971 and 2001 except for the 6-17 year old group

Table 2

Alberta Population by Selected Age Groups and Sex
1971 - 2001

Age Group	Name[1]	1971 Population		1976 Population		1981 Population		1986 Population		1991 Population		1996 Population		2001 Population	
		% Males	% of Total	% Males	% of Total	% Males	% of Total	% Males	% of Total	% Males	% of Total	% Males	% of Total	% Males	% of Total
0- 5	Early Childhood	199,702		237,465		279,545		316,395		335,734		353,775		387,268	
		50.7	12.4	50.7	13.3	50.8	14.1	50.8	14.4	50.9	13.8	50.8	13.2	50.8	13.2
6-17	Education	426,266		422,435		433,700		499,977		578,465		641,665		684,338	
		51.0	26.5	50.7	23.7	50.7	21.9	51.0	22.7	50.6	23.8	50.6	24.0	50.7	23.4
18-24	Higher Ed.-Work	189,114		231,002		259,369		244,195		252,971		298,347		346,530	
		50.0	11.8	51.1	13.0	50.7	13.1	50.9	11.1	50.1	10.4	50.5	11.2	50.4	11.9
25-39	Work-Cont. Ed.	298,362		342,169		413,737		494,744		542,422		556,500		578,927	
		49.6	18.6	49.9	19.2	50.9	20.9	50.5	22.4	50.8	22.3	50.3	20.8	50.2	19.8
40-59	Work-Cont. Ed.	326,660		354,576		374,272		396,761		440,680		511,319		601,846	
		51.6	20.3	51.3	20.0	49.4	18.9	48.7	18.0	49.6	18.1	50.6	19.2	50.3	20.6
60+	Work-Retire	168,256		192,200		220,212		252,530		284,392		309,727		328,815	
		51.1	10.5	49.8	10.8	49.0	11.1	48.4	11.5	49.7	11.7	49.4	11.6	47.6	11.2
TOTAL*		1,608,335		1,779,814		1,980,806		2,204,578		2,434,632		2,671,320		2,927,687	
		50.7	100.0	50.4	100.0	50.3	100.0	50.0	100.0	49.9	100.0	49.7	100.0	49.8	100.0

Source: A.B.S. detailed computer print outs of "high more likely (net in-migration = 5000 per year) projections," 1967-2001.

*Errors due to rounding of fractional number of persons generated in calculating projection.

[1] Clarification suggested by N. Chamchuk, Alberta Colleges Commission.

which increases by 57 percent.

Table 2 confirms Seastone's (1971: 17) finding that "the most visible characteristic of sex distribution during the forecast period was the remarkable similarity in numbers of total females and males." In 2001, 49.8 percent of the population will be male.

PROVINCIAL COLLEGE ENROLMENTS

In this paper, enrolment projections are based upon:

1. the assumption that enrolments are closely related to populations;

2. historical enrolment data respecting the three systems of public education in the province, elementary-secondary, college, and university;

3. potential-student "pools" which are defined in terms of age groups which in turn are closely related to aspects of college education.

In all cases, projection data derive from the examination of trends, and thus another assumption is implicit: the nature of education and enrolments in the future can be predicted accurately by the extension of historical trends.

However, not just historical data will be used in the projections: when the proportion of students from each pool who will avail themselves of programs in the college system is determined, it will be necessary to consider the educational needs of these persons and the degree to which colleges will adapt to the fulfilment of these needs.

Literature on College System Enrolment Projections in Alberta

Using a method similar to the present one, and under the assumptions that the proportion of students attending colleges to the number attending universities will increase each year, that college programs will be of two years' duration, and that the basic pool from which these students will be drawn will continue to consist of grade 11 and 12 students, Fenske (1969: 4) projected enrolments of 22 thousand in 1971, 26 thousand in 1972, 27 thousand in 1973 and 26 thousand in 1974. A further assumption based on historical trends was that additional numbers of adults would enrol each year and that the numbers of adults could be predicted by calculating them as a percentage of the post-high school pool: 14, 16, 18 and 20 percent, respectively in 1971 through 1974. In this manner, Fenske calculated the total college system enrolments as shown in Table 3: 25 thousand in 1971, 30 thousand in 1972, 31.5 thousand in 1973, and 31.4 thousand in 1974.

As is also shown in Table 3, Seastone (1971: 53) projected the full-time post-secondary non-university enrolment in Alberta as 14.2 thousand in 1971-72, 18.4 thousand in 1973, and 23.2 thousand in 1976-77, 27.6 thousand in 1980-81, 29.5 thousand in 1985-86, and 46.7 thousand in 2000-01.

From the base of 1.6 and 6.9 thousand full-time college students in Alberta in 1951-52 and 1967-68, the Economic Council of Canada (Zsigmond and Wenaas, 1970: 58) predicted that there would be 27.6 thousand full-time college students in Alberta by 1980-81 (as compared with 66.0 thousand full-time university students). (See Table 3).

Table 3

Comparisons of College Enrolment Projections (x 1000)

Source	1971	1972	1973	1974	1976	1981	1986	1991	1996	2001
Fast and Fenske[1]	25.1	30.3	31.5	31.4						
Seastone (E.C.C.)[2]	14.2	16.4	18.4	20.4	23.2	28.0	29.5	38.6	39.0	58.0
P.S. Task Force[3]					41*	47	51*	56*	62*	69*

[1] (1969:4); no projection available beyond 1974.

[2] (1971: 53); Economic Council of Canada figures projected by Seastone to 2001.

[3] Interim Proposals, Post-Secondary Education Task Force, Commission on Educational Planning (1971: 49).

*1976, 1986 to 2001 figures assume that the same participation rate applies as in 1981 according to Fast (1971: 49-50).

NOTE: See Table A-12 for college and university enrolments.

The Post-Secondary Education Task Force of the Commission on Educational Planning reported the above enrolment predictions of Seastone and the Economic Council of Canada. In addition, however, the Task Force proposed a ". . . more future-oriented approach (1971: 49)" to enrolment projections which was based upon these assumptions:

> 1. By 1980, 30% of the 18-24 age group will spend an average of five years of full-time study (as presently defined by university calendars) at a university.
> 2. . . . 30% of the 25-65 age group . . . , three years . . . .
> 3. . . . 30% of the 18-24 age group will spend an average of two years of full-time study in a college . . . .
> 4. . . . 30% of the 25-65 age group . . . , two years . . . (Commission on Educational Planning, 1971: 49-50).

Accordingly, the Task Force's calculations revealed that by 1980 there will be 93 thousand full-time university students, and *46.5 thousand full-time equivalent students in the college system.* (See Table 3).

Because Seastone and the Task Force referred to full-time equivalents whereas Fenske referred to numbers of persons served and because the projection periods used varied, it is difficult to infer from the literature a single representative projection of the college system enrolment. Seastone's projections, which were made for the longest period, represented an average annual increase of 10.3 percent. The Task Force's predictions increased 2.7 percent annually. Since Fenske's projection period was relatively short, he may not agree with projections beyond 1974 even if they were based upon his 8.4 percent yearly increase factor. Nevertheless, since two of the sources projected somewhat similar enrolments for the year 2001, it may be fair to summarize the sparse literature concerning college enrolments by indicating that approximately 75,000 full-time and full-time equivalent students will be served in 2001.

This suggests that a common rule-of-thumb--that college F.T.E.'s normally do not exceed 2 percent of the population--may require reexamination since 2 percent of the 2001 Alberta population projection is only 58,550.

The Effect of Nature of Registration on Enrolments

The problems associated with the various methods of reporting enrolments have already been discussed.

1970-71 data from the college system suggest a method by which enrolments reported in a variety of ways might be reconciled or converted from one from to another.

1. According to Table 4, the system served 19,997 full-time students and 10,823 part-time students, a ratio of approximately 2 : 1.

2. The ratio of full-time to extension enrolments was about 1 : 3.5.

3. In the Public College subsystem, 1 F.T.E. comprised approximately 1.9 part-time students (on the average), according to Table A-15.

Applying these factors to the projection of 75,000 full-time equivalent students in the system by the year 2001 reveals the following:

Table 4

Estimated Numbers of Persons Served by the College System (and by Proprietory Schools) in Alberta[1] (1970-71)

Institution or Type of Program	Student Enrolments[2]			
	Full-time	Part-time	Extension	Very Short Term
Public Colleges	4,123	1,580	3,512	
Institutes of Technology NAIT & SAIT	5,788		17,244	
Agricultural Colleges	642		661	30,901
Forest Technology School	20		1,235	
AVCs, Petroleum Training, Rehab. of disabled	3,300			
Nurses' Training	1,814			
*Nursing Aides, Orderlies	840			
Apprenticeship Programs		9,243		
*University Extension (Three Universities)			17,847	
*Adult Extension in High Schools (Dept of Ed. Reg.)			31,117	
*Parks, Recreational, YMCA Community Leagues, etc.				49,427
Private Colleges	1,600			
TOTALS	18,127	10,823	71,616	80,328
Registered Proprietory Schools	1,870		1,146	
TOTALS Including Proprietory Schools	19,997	10,823	72,762	80,328

[1] Head count enrolment figures; reporting times vary but are within the period September 1970 to May 1971 which make data sufficiently comparable for purpose of examing approximate ratios of types of students.

[2] Subjective criteria used to classify enrolments (see text).

*These figures from Fisher (1971); remainder from tables included in this report. Other data are from Tables A-15 to A-21.

59,375	full-time students
31,250	part-time students
207,800	extension students
298,425	total number of persons served
75,000	F.T.E. students.*

According to Seastone (1971: 89), the Alberta labor force will grow from 39.2 to 42.6 percent of the population (or from 64 to 66.7 percent of the 15-64 age group) during the period 1970 to 1980. Dyck (1970: 101) reported that one view of the future of Alberta is that there will be no radical reduction in the labor force before the year 2000. Nevertheless, the average person could well spend half of his life engaged in some type of educational pursuit whether for leisure or for job retraining (Dyck, 1970: 105). Of the 1.9 million Albertans over the age of 17 in 2001, only about 60,000 will be in universities (see Table A-12); this leaves more than 1.8 millions as potential college students. Whether the majority of these are in the work force, are employed in demanding jobs, are in routine jobs, or are unemployed will not affect the total extent to which they will possess a need for some type of service from the college system. This is particularly true since the system will become more and more involved in programs which upgrade job skills, retrain persons for new jobs, or prepare people to make better use of their leisure time both before and after retirement from the labor force:

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*Similar calculations show that an additional 238,000 persons would be served on a one-time or very short-term basis through recreational or community service types of programs. (Table 4: ratio of full-time to very short term enrolments = 1 : 4).

> It is likely that the demand for post-secondary education will increase sharply over the next three decades, as will the use of leisure time for continuing education . . . . It appears that educational institutions will, in the future, become somewhat more responsive to changes in values and social conditions. (Dyck, 1970: 93, 95).

Therefore, the tentative projection of nearly 300,000 persons enrolled in the college system by the year 2000 may be reasonable when the 18-60+ age-group is projected to be 1.9 millions of persons (Table 2), and when the figure of 300,000 represents an F.T.E. enrolment of 75,000.

THE "POOL METHOD" OF PROJECTING COLLEGE ENROLMENTS

This methodology was adapted by Fast (1968) and further by Fenske (1969) for predicting enrolments in the subsystem of Public Colleges. It was used in the present study with still further modifications.

Briefly, the technique identifies those sectors of the population from which various categories of potential students may be drawn. Thus, not only must one examine where students have been drawn from in the past, but also one must examine the role of colleges in the future and educational needs in the future. Once the pools are identified, the task remains to determine what proportion of each will actually enroll as students. This is approached by examining (1) the percentages of students from each pool who have availed themselves of the college system's services in the past, and (2) how the dynamic society might change the extent and nature of educational needs.

It is assumed that a major pool of Albertans from which college enrolments (as well as university enrolments) as drawn is that pool of persons completing high school. In 1969-70, there were 27,138 grade 12 students in the province (see Table A-13); ten years earlier there were just 11,291 students registered in grade 12. Projected first-year university enrolments are subtracted from the projected numbers of persons completing or leaving grade 12; this yields the pool of potential college students. The rationale for predicting college enrolments on the basis of grade 12 and university enrolments rather than on the basis of historical data on college enrolments is that trends in elementary-secondary and in university education are based on longer and less erratic histories than that of the college system.

The Grade 12 Pool

Table 5 isolates grade 12 enrolments for an eleven year period to the present time, and indicates for each year the percentage of grade 12 students originally enrolled in grade 1 eleven years earlier. The survival rate of cohort groups increased from 55.4 percent in 1960 to 88.4 percent in 1970. The grade 12 enrolments for each year to 1981 can be calculated by projecting the survival rate and applying it to the actual grade 1 enrolment in each year during the 1960-70 period. Table 6 presents grade 12 enrolments to 1980 projected in this manner. The

Table 5

Grade 12 Enrolments Compared to the Number of Students Who Entered Grade 1 Eleven Years Previous*

Year	Grade Twelve Enrolment	Original Number Enrolled in Grade One	Percent Retention
1959-60	11,291	20,504	55.4
1960-61	13,223	22,253	59.5
1961-62	14,160	21,900	64.4
1962-63	14,692	22,416	65.7
1963-64	16,697	25,343	62.1
1964-65	20,172	27,939	72.0
1965-66	21,781	26,413	82.2
1966-67	21,970	27,188	81.2
1967-68	22,484	27,397	82.0
1968-69	25,199	28,955	87.0
1969-70	27,138	30,716	88.4

*Source: Department of Education Reports, 1960-71.

Table 6

Grade 12 Enrolments 1970-71 to 1980-81 Based on Projected Rates of Retention in Grade 12 of the Original Number Enrolled in Grade 1

Year	Original Number in Grade 1**	Retention Rates***	Projected Grade 12 Enrolments*
1968-69	28,955	87.0	25,199
1969-70	30,716	88.4	27,138
1970-71	32,536	91.4	29,738
1971-72	34,520	94.4	32,587
1972-73	35,555	97.4	34,631
1973-74	35,257	100.4	35,398
1974-75	36,554	103.4	37,797
1975-76	37,241	106.4	39,624
1976-77	38,160	109.4	41,747
1977-78	38,441	110.0	42,285
1978-79	38,550	110.0	42,405
1979-80	38,932	110.0	42,825
1980-81	39,567	110.0	43,524

*1968-70, actual.

**Source: Alberta Department of Education Annual Report, 1958-70.

***Retention rates from Table 5 projected to increase by 3.0 yearly until 1975-76 after which time they are seen as gradually levelling off to 110 percent (see text, page 33).

projected survival rates in excess of 100 percent may be explained by (1) the effects of in-migration exceeding out-migration, (2) accelerated and retarded progress of some students through the twelve grades, and (3) re-entry of adults into the high schools.

A likely effect of the simultaneous phenomena of (1) high retention rates of the grade one cohort, and (2) substantial numbers of adults returning to complete grade 12 would be a steady increase in the proportion of the 18 to 20 year-olds which will complete grade 12. In fact, an assumption used in this study is that virtually all pupils currently enrolled in grade one will complete grade 12 in eleven or, at most, thirteen years. This assumption represents a cohort survival of nearly 100 percent; the remaining 10 percent are accounted for as was indicated in the preceding paragraph, by adults, and in-migrants. (Table A-14 indicates that the percentage of persons completing grade 12 of those who enrolled in grade one rose from 54 percent in 1959 to 70 percent in 1969).

Since the retention rate of grade 12 students will level off at 100 percent by 1981, any further increases in grade 12 enrolments will be due mainly to population changes. Therefore, the projections of grade 12 enrolments after 1981-82 were calculated from a fixed percentage of the 18 year age group. Table 7 includes projections beuong 1981 to 2001.

In summary, grade 12 enrolments between 1971 and 2001 were

Table 7

Provincial Grade 12 Enrolments to 2001 Based on the Projected 18-Year Population

Year	Alberta 18 Year-Olds[1]	% of 18 Year-Olds in Grade 12[2]	Projected Grade 12 Enrolments[3]
1955-56	15,708	51.2	8,045
1960-61	18,743	75.5	14,160
1965-66	25,510	86.1	21,970
1970-71	29,746	106.4	31,650
1971-72	32,628	108.0	35,336
1972-73	33,015	110.0	36,383
1973-74	35,133	112.0	39,384
1974-75	34,497	114.0	39,327
1975-76	35,875	116.0	41,165
1976-77	36,820	116.0	42,711
1977-78	37,442		43,433
1978-79	37,594		43,609
1979-80	37,494		43,493
1980-81	37,846		43,901
1981-82	37,790	116.0	43,836
1982-83	33,205		38,518
1983-84	31,492		36,531
1984-85	30,463		35,337
1985-86	34,107		39,564
1986-87	35,144	116.0	40,767
1987-88	36,173		41,961
1988-89	37,310		43,280
1989-90	38,344		44,479
1990-91	39,579	116.0	45,912
1991-92	40,851		47,387
1992-93	42,269		49,032
1993-94	43,751		50,751
1994-95	45,243		52,482
1995-96	46,607		54,064
1996-97	47,995	116.0	55,674
1997-98	49,436		57,346
1998-99	50,762		58,884
1999-00	51,947		60,259
2000-01	52,996		61,475

[1] A.B.S. "high most likely" projections (August, 1971).

[2] Actual to 1970-71; Assumed to continue to increase by approximately 2.0% per year to 116.0% in 1975-76; From 1975 to 2001 the participation rate is assumed to remain constant at 116.0.

[3] Actual to 1970-71.

projected as far as 1981 by means of a cohort survival technique, and from 1981 to 2001 as a fixed percentage of the projected 18-year-old population. Accordingly, there will be about 43 thousand grade 12 students in Alberta in 1976-77; 44 thousand by 1981; only 40 thousand in 1986; and, approximately 61 thousand by the year 2001.

University Enrolments

Both the university system and the college system of post-secondary education draw considerable numbers of their students from the grade 12 pool. A basic pool of potential students for one system is the grade 12 pool minus those who enter the other system. Since college enrolments include second-year as well as first-year students, the pool of grade 12 students from which a college draws in a given year equals the number of students who went from high school to universities in that year and the previous one subtracted from the grade 12 pool of the two previous years. The pool thus defined is referred as the "net grade 12 pool."

An advantage of predicting potential college enrolments by means of examining the net grade 12 pool is that reliable forecasts of grade 12 enrolments and university enrolments can be used instead of the sporadic data on enrolments in the college system; (Tables A-16 to A-21 show erratic enrolment trends over the short history of colleges).

Table 8 summarizes the Alberta Universities Commission's (1970) various estimates of first- and second-year enrolments in all the provincial universities during the period 1970-1981. (Extrapolations to 1981-82 and 2001-02 have been added to the table). First- and second-year enrolments in Alberta universities will increase from 16,770 in 1971 to about 42,000 by the year 2002. (The low estimates are quoted because the actual total enrolments for 1970-71 and 1971-72 proved to be nearer the low estimate which had been made only one year earlier).

The projections of the net pool in Table 9 (column 3) may be interpreted as follows: a major portion of college enrolments will continue to be drawn from the grade 12 pool. It is unlikely that *all* students in the pool will decide to pursue post-secondary educational programs; however, of the pool of 52,337 students available in 1970-71, for example, 19,535 of them enrolled at a university and 51 percent of the remaining 36,802 attended a college.

By 1986-87, the net pool will decrease to 42,143, but it will have increased to nearly 80 thousand by 2001.

Table 8

First- and Second-Year University Enrolment Projections to 1981 and 2002*

Year	Alberta & Athabasca			Calgary			Lethbridge			Total		
	Low	Med.	High	Low	Med.	High	Low	Med.	High	Low	Med.	High
70-71	9,820	10,185	10,495	4,800	4,985	5,155	915	935	950	15,535	16,105	16,600
71-72	10,530	11,365	11,870	5,265	5,685	5,950	975	1,030	1,065	16,770	18,080	18,885
72-73	11,225	12,480	13,310	5,670	6,370	6,785	1,035	1,120	1,195	17,950	19,970	21,290
73-74	11,915	13,840	14,505	6,105	6,885	7,495	1,075	1,195	1,295	19,095	21,420	23,295
74-75	12,595	14,025	15,395	6,515	7,310	8,055	1,125	1,250	1,360	20,235	22,585	24,810
75-76	13,185	14,640	16,020	6,865	7,690	8,430	1,165	1,285	1,400	21,215	23,615	25,850
76-77	13,720	15,335	16,670	7,185	8,090	8,830	1,210	1,340	1,455	22,115	24,765	26,955
77-78	14,215	15,950	17,500	7,470	8,430	9,295	1,255	1,405	1,545	22,940	25,785	28,340
78-79	14,545	16,465	18,145	7,710	8,750	9,685	1,295	1,455	1,610	23,550	26,670	29,440
79-80	14,800	16,775	18,520	7,855	8,950	9,955	1,325	1,480	1,650	23,980	27,205	30,125
80-81	14,940	17,040	18,745	7,955	9,125	10,100	1,340	1,515	1,675	24,235	27,680	30,520
81-82										25,432		
86-87										31,360		

*SOURCES: 1970-1981, Alberta Universities Commission; 1982-2002, calculated.

Table 9

Summary of Projection Methodologies and Data
And College Enrolment Projections
for Alberta 1971-2001

Column #					1	2	3	4	5	6	7	8	9	10	11	12	13
Year*	Total Alberta Population	18-24 Population	25-39 Population	25-59 Population	Grade 12 Pool	1st & 2nd Yr. Univer. Enrol.	Full, Part-time Net Grade 12 Pool	College Enrol. from Gr. 12 Pool	% of Net Pool	Full, Part-time College Enrolments 25-39 Pool	% of 25-39 Pool	TOTAL Full-time Part-time College Enrolments	% of Total Population	Extension Enrolments	% of 25-59 Pool	Total College Enrolments	% of Total Population
1966-7	1,463,203	153,003	282,177	571,702	41,953	8,249	33,704	18,051	(53.6)	1,580	(0.56)	19,631	(1.3)	47,978	(8.4)	67,609	(4.6)
1967-8	1,488,409	160,440	284,812	581,431	43,571	9,816	33,935	20,276	(59.7)	2,761	(0.97)	23,037	(1.5)	54,020	(9.3)	77,057	(5.2)
1968-9	1,517,130	166,874	288,281	591,937	44,454	11,018	33,436	22,368	(66.9)	4,047	(1.40)	26,415	(1.7)	58,678	(9.9)	85,093	(5.6)
1969-0	1,546,073	173,392	291,100	602,619	47,683	13,745	33,938	23,411	(70.0)	3,260	(1.12)	26,671	(1.7)	63,541	(10.5)	90,212	(5.8)
1970-1	1,577,040	181,058	294,475	613,752	52,337	15,535	36,802	25,650	(70.0)	3,300	(1.12)	28,950	(1.8)	71,616	(11.7)	100,566	(6.4)
1971-2	1,608,335	189,114	298,362	625,022	56,876	16,770	40,106	28,475	(71.0)	5,967	(2.0)	34,442	(2.1)	78,128	(12.5)	112,570	(7.0)
1972-3	1,640,445	196,268	307,266	640,394	62,325	17,950	44,375	32,394	(73.0)	7,682	(2.5)	40,076	(2.4)	85,172	(13.3)	125,248	(7.6)
1973-4	1,673,580	203,756	315,460	654,768	67,218	19,095	48,123	36,092	(75.0)	9,464	(3.0)	45,556	(2.7)	92,322	(14.1)	137,878	(8.2)
1974-5	1,707,772	213,331	324,002	668,229	70,029	20,235	49,794	38,341	(77.0)	11,340	(3.5)	49,681	(2.9)	99,566	(14.9)	149,247	(8.7)
1975-6	1,743,164	221,611	334,413	683,490	73,195	21,215	51,980	41,064	(79.0)	15,049	(4.5)	56,113	(3.2)	107,308	(15.7)	163,421	(9.4)
1976-7	1,779,814	231,002	342,169	696,745	77,421	22,115	55,306	44,798	(81.0)	17,108	(5.0)	61,906	(3.5)	114,963	(16.5)	176,869	(9.9)
1977-8	1,817,733	239,593	354,319	712,621	81,371	22,940	58,431	47,913	(82.0)	17,716	(5.0)	65,629	(3.6)	120,433	(16.9)	186,062	(10.2)
1978-9	1,856,772	247,256	367,055	729,984	84,032	23,550	60,482	50,200	(83.0)	18,353	(5.0)	68,553	(3.7)	126,287	(17.3)	194,840	(10.5)
1979-0	1,896,972	252,206	382,081	749,595	84,690	23,980	60,710	50,996	(84.0)	19,104	(5.0)	70,100	(3.7)	132,743	(17.7)	202,843	(10.7)
1980-1	1,938,352	256,665	397,475	768,555	85,230	24,235	60,995	51,846	(85.0)	19,874	(5.0)	71,720	(3.7)	139,108	(18.1)	210,828	(10.9)
1981-2	1,980,806	259,369	413,737	788,009	86,349	25,423	60,926	52,396	(86.0)	20,687	(5.0)	73,083	(3.7)	145,782	(18.5)	218,865	(11.0)
1986-7	2,204,578	244,195	494,744	891,515	74,901	31,360	43,541	37,445	(86.0)	24,737	(5.0)	62,182	(2.8)	164,930	(18.5)	227,112	(10.3)
2001-2	2,927,687	346,530	578,927	1,180,773	121,734	41,930	79,804	68,631	(86.0)	5,789	(1.0)	74,420	(2.5)	218,443	(18.5)	292,863	(10.0)

*1966-67 to 1970-71 are actual.

[1] In any year the grade 12 pool is the sum of the two previous year's grade 12 enrolments.
Source: Table 6 to 1981-82; Table 7 1986 to 2002.

[2] Source: Table 8.

[3] Column 3 = Column 1 minus Column 2.

Percentage of the Net Grade 12 Pool in Colleges

Since the net pool comprises *potential* students, it is necessary to attempt to determine what percentage of this pool will enter the college system. Past experience is that this percentage was 53.6 in 1966-67, and that it increased to 70 by 1970-71. The resultant trend tends to confirm an assumption that 90 percent of those persons in the grade 12 pool in any year beyond 1980-81 will complete two or more years of university or college education. Accordingly, percentage values were projected as shown in column 5 of Table 9.* Column 4 converts the percentages to actual numbers of full- and part-time college students beyond 1970-71: there will be about 45 thousand full- and part-time students from this pool in the college system in 1976-77, 37 thousand in 1986-87, and 69 thousand by the year 2001.

The Pool of Albertans Aged 25-39 Years

In addition to students from the grade 12 pool, there were a few adults enrolled in colleges between 1966 and 1971: 1,580 (.56 percent of the 25-39 year pool) in 1966-67, and 3,300 (1.12 percent of the 25-39 year pool) in 1970-71 have been accounted for in column 6 of Table 9.

Until about 1976-77, the persons from the net grade 12 pool entering the college system will continue to include substantial numbers of adults as was discussed earlier. Therefore, not until at least 1977 will the 25-39 year pool become discrete. On the basis of this and the assumption that 90 percent of the number of persons completing grade 12 in 1979-80 completed two or more years of higher education by 1981-82, the extent of the contribution to college full-time and part-time enrolments from the 25-39 year pool can be approximated.

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*Simple calculations reveal that 86 percent of the net pool must enrol in college if 90 percent of the grade 12 pool is to complete two or more years of university or college.

Percent of the 25-39 pool entering the college system. It will take at least until 1997 before most persons in that group have fourteen years of education.*

Before 1976 many 25-39 year olds will be accounted for in the grade 12. In 1976-77, the 25-26 year olds will have been in the grade pool seven years earlier (1969-70) when only 65 percent of the grade 12 pool entered college or university. With drop-outs considered, perhaps 50 percent of the 1969-70 grade 12 pool was not accounted for.

Of this 50 percent (23,842), 11,580 enrolled in college programs not drawing primarily from the grade 12 pool leaving 47 percent not accounted for. In terms of the entire 25-39 age group, 6.5 percent of the persons therein will have to enrol in 1976-77 and in each subsequent year until 1996-97 if 100 percent of the 25-39 group is to have completed 14 or more years of education. However, (1) From 1971-76, likely one or two percent of the 25-39 group will continue to enrol; (2) Between 1979 to 1996, the required 6.5 percent likely will *not* all enrol; and thus, (3) some fraction of the group will still not have had 14 years of education past 1997.

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*Note the assumption that by 1981-82 nearly all persons between about 18 and 20 years of age will attain 2 or more years of college or university.

On this basis, the percentages in column 7 of Table 9 were derived; five percent of the 25-39 age group, or 17 thousand persons, will enrol as full- or part-time college students in 1976-77 in addition to the 45 thousand students from the net grade 12 pool. In 1981-82, 20,687 adults will enrol; and in 1986-87, there will be about 25 thousand.

Extension Enrolments from the 25-29 Age Group

The total number of extension students in the system increased from 48 thousand to 72 thousand during the short period 1966-67 to 1970-71 (column 10, Table 9). If this steady--although short--trend is projected linearly, there would be 37 percent of the 25-59 age group enrolled in extension programs by 2001-02. Because of the already projected greater full-time participation of the 25-39 year old pool and the unknown aspects of the future role of extension education, the 1966 to 1970 observed trend was moderated as shown in column 11 of Table 9.

As a result, actual numbers of persons shown in column 10 show 115 thousand extension students in 1976-77, 146 thousand in 1981-82, and more than 200 thousand by 2001.

SUMMARY OF CHAPTER 2

It is interesting to recall that literature reviewed earlier indicated that by the year 2001 there would be in the college system approximately 75,000 FTE students, or 300,000 actual persons served.

Table 9 (column 12) supported this by projecting a total of 292,863 full-time, part-time, and extension students.

The pool method of projecting college enrolments encountered the problem of overlap between the net grade 12 pool and the 25-39 year old pool because until about 1976 there will be substantial numbers of 25-39 year olds in the grade 12 pool. Second, the lack of periodic demographic data on students enrolled in the past prevented making precise distinctions among the 25-39, the 40 to 59, and the 59 years or older pool.

Assumptions. The projections of college enrolments were based on the following assumptions:

1. The major pool from which full-time college students are drawn is the grade 12 pool.

2. The low projections of first- and second-year university enrolments were accurate as provided by the Alberta Universities Commission.

3. The "high most likely" projections of the Alberta population and populations by age groups (1966 to 2002) prepared by the Alberta Bureau of Statistics are accurate.

4. Provincially, a cohort-survival method of projecting grade 12 enrolments is most accurate until about 1981 beyond which time grade 12 enrolments may be best calculated as a percentage of the age 18 population.

5. Virtually everyone in Alberta aged 18-20 years will have completed grade 12 by 1977.

6. Ninety percent of Albertans who complete grade 12 in 1979-80 will complete at least two years of university or college.

7. There will be a continued increasing demand for post-secondary education such that the college system will continue to grow until the turn of the century.

Implications

Reviewing Table 9 reveals some interesting implications of the projections.

1. After 1976-77--when most Albertans over 18 have completed grade 12--the total full-time and part-time enrolments remain almost fixed percentages of the total population each year; similarly the total full-time, part-time, and extension enrolments were found to remain as fixed proportions of the total population after about 1975-76.

2. Because of the gradually increasing level of educational attainment, the demand for higher education may cease to increase--or may even decrease--after the turn of the century. However, until all possible alternative roles for the college system are evaluated, such an inference remains very tentative.

Findings. The following summarizes the findings to this point with respect to problems 1 and 2 of the study:

	1976	1981	1986	2001
Alberta Population	1,779,814	1,980,806	2,204,578	2,982,295
College System Full and Part-time Enrolments	61,906	73,083	62,182	74,420
College System Enrolments including Extension	176,869	218,865	227,112	292,863

Subsystem Enrolments

Public colleges, agricultural colleges, and the institutes of technology are important subsystems which--as wholes--serve the entire province rather than individual regions. In response to Problem 3, projections for each of the three subsystems were partialled out from the above totals and then compared to separate projections made within each subsystem. In most cases, subsystem projections for the purposes of this study were calculated by applying projected system increase factors to 1970-71 actual enrolment figures.

Table 10 was intended to show the frequent discrepancies between projections based on a system approach, and those (where available) done within the subsystems rather then intended to reconcile the differences. In 1981-82, public colleges will enrol 20 thousand full-time, part-time and extension students (FTE = 12.5 thousand); the institutes of technology will enrol 17 thousand full-time students and 35 thousand extension and correspondence students; the agricultural colleges, just short of one thousand students.

It is difficult to partial out enrolments in apprenticeship programs because of this type of post-secondary education may become redundant or irrelevant in view of the increasing comprehensiveness of the range of offerings in institutes of technology and in view of the predictions that all persons 18 years or older will have completed grade 12 beyond 1980, and 90 percent of the Alberta population 20 years or older will have completed at least two years of college or university beyond 1997.

Table 10

Enrolment Projections in Selected Subsystems* (And Comparisons Between Them and Projections From Other Sources)

Subsystem	Source of Projection	Type of Enrolment Projected	Year		
			1970-71	1976-77	1981-82
Public Colleges	Colleges Com.[1]	FTE	4,958	18,000[2]	-
	Present Study	FTE	4,958	10,610	12,520
	Present Study	Full+Part-time	5,703	12,204	14,401
		Extension	3,512	5,654	7,181
		Total Headcount	9,215	17,858	21,582
Institutes of Technology	Institutes[3]	Full-time (day)	6,698	13,946[4]	20,000[4]
		Extension	17,244	24,636[4]	28,000[4]
		Total	23,942	38,582	48,000
	Present Study	Full-time (day)	6,698	14,334	16,914
		Extension	17,244	27,763	35,259
		Total	23,942	42,097	52,173
Agricultural Colleges	Dept. of Agriculture[5]	Full-time	642	1,100[6]	-
	Present Study	Full-time	642	1,373[7]	1,620[7]
Apprentice-Ship[8]	Present Study	Total Headcount	9,243	19,780	23,340
Hospital Based Nursing[9]			1,814	3,882	4,581

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[1] Fenske (1969: 6)..

[2] Extrapolated from 1969 to 1975 projections.

[3] From Tables A-18, A-19.

[4] Extrapolated from 1970 to 1975 projections.

[5] From Table A-17.

[6] Extrapolated from 1968-9 to 1973-4 projections.

[7] Assumes Vermilion still to be an Agricultural College. Likely all will be Public Colleges by 1981-82.

[8] No comparison available.

[9] Nursing kept separate; however, these programs may be subsumed by Public Colleges by approximately 1980.

*Projected on basis of system increases--Table 9.

Similarly, nursing programs will likely be phased out of hospital-based schools into public colleges by the year 1977 (A.A.R.N., 1970: 30-33).

Chapter 3

POPULATIONS AND COLLEGE ENROLMENTS IN EIGHT COLLEGE REGIONS IN ALBERTA

INTRODUCTION

The primary reason for examining college enrolments by regions is that provincial projections do not necessarily reflect demographic, economic, and social characteristics of various regions within the province. Secondly, a system approach to educational planning is adopted so that programs and services can be effectively and efficiently allocated throughout the system.

Nevertheless, any program or service in the system can conceivably serve any student in the province. Therefore college regions are primarily defined to facilitate planning, and not to limit accessibility.

College Regions

Eight college regions were adapted from Hanson (1968) as shown in Figure A-1. This chapter will present population projections and enrolment predictions for each region in a manner similar to that used in the preceding chapter with respect to the entire province.

The Pool Method of Projecting Enrolments Applied to Regions

Before examining populations and enrolments, it is necessary to comment upon two problems associated with applying this technique to regions.

First, since age-group populations for each region were not available, the grade 12 enrolments were projected as a percentage of the total population, rather than of the 18 year old population as was done for the province.

Second, the assumption implicit in the preceding chapter--that college projections may be based upon the difference between consecutive grade 12 enrolments and first- and second year university enrolments--may not be as acceptable in regions. The reason for this is that university enrolments in the province as a whole may be predictable from historical trends of total enrolment and of enrolment as a percentage of certain segments of the population; however, regional university enrolments--that is, the number of persons from any region who attend an Alberta university--may in fact be considerably dependent upon college enrolments. For example, many colleges have university transfer programs, and the accessibility of these may be closely related to the number of persons who enrol subsequently in second, third, fourth, etc. years of university.

REGIONAL POPULATIONS

In Table 11, Hanson's (1968) regional[*] projections are compared with projections based on Provincial Planning Branch (1967) projections for every city, town, rural authority, and Indian reserve, and on projections of census division populations prepared by the Oil and Gas Conservation Board (1970), In some regions, the population is projected to grow steadily and rapidly until 2001; for example, the Edmonton regional population will increase from 732 thousand to about 1.3 million between 1971 and 2001, Calgary from 494 thousand to 996 thousand. Other regions will change very little: Medicine Hat at 48 thousand; Vermilion declining slightly from 44 to 37 thousand.

Table A-9 in the appendices shows that the growth in total populations will be accompanied by significant declines both percentage-wise and in absolute figures of the rural subpopulations of all regions except Grande Prairie and Vermilion which are still experiencing increases in rural areas and in unincoporated towns and villages.

In all regions where Indian reserves are located (see Appendix B for additional data), the populations on the reserves are enlarging at a faster rate than the total regional populations. The enrolment projections in all sections of this paper account for Indian populations, not only in terms of adult extension programs but also with respect to full-time college programs.

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[*] Note that figures of Hanson are only approximately comparable to the other two sets because the latter are based on regions which were not perfectly congruent, in some cases, with Hanson's.

Table 11

Comparisons of College Region Population Projections

Region	Projection Sources	Populations and Projections x 1000					
		1961	1966	1971	1976	1981	2001
Edmonton	Hanson[1]	588*	659*	726	802	883	(1197)
	Planning Branch[2]	585	655	734	(841)	948	(1376)
	OGCB[3]	585	655	732	815	927	1300
Medicine Hat	Hanson	41*	41*	39	38	37	(33)
	Planning Branch	48	47	47	(50)	52	(55)
	OGCB	48	47	47	48	49	48
Lethbridge	Hanson	118*	114*	110	106	105	(95)
	Planning Branch	112	108	115	(112)	110	(100)
	OGCB	112	108	112	116	122	127
Calgary	Hanson	382	430	484	550	616	(880)
	Planning Branch	382	430	504	(548)	592	(768)
	OGCB	382	430	494	565	645	996
Red Deer	Hanson	93	100	104	108	110	(122)
	Planning Branch	93	100	103	115	126	(172)
	OGCB	93	100	106	113	126	168
Grande Prairie	Hanson	44	49	53	57	62	(72)
	Planning Branch	44	49	51	(57)	62	(84)
	OGCB	44	49	54	61	68	98

Continued . . .

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[1] Hanson (1968: 23); 1976 values interpolated, 2001 extrapolated.

[2] Planning Branch (1967) as computed in Tables A-1 to A-9 of the present study.

[3] Oil and Gas Conservation Board (1970) as computed in Table A-10 of the present study.

*Actual populations used by Hanson do not agree with the other two in cases where Hanson's college regions were not coincident with those defined in the present study.

Table 11 (Continued)

Comparisons of College Region Population Projections

Region	Projection Sources	Populations and Projections x 1000					
		1961	1966	1971	1976	1981	2001
Vermilion	Hanson	39*	38	36	36	35	(31)
	Planning Branch	43	44	44	(44)	45	(47)
	OGCB	43	44	44	44	43	37
Fairview	Hanson	27*	32*	35	38	42	(56)
	Planning Branch	25	29	32	(37)	42	(62)
	OGCB	25	29	33	37	41	59
All Alberta	Hanson	1332	1463	1590	1735	1890	2490
	Planning Branch	1332	1463	1641	(1809)	1977	(2649)
	OGCB	1332	1463	1623	1801	2001	(2845)
	ABS[4]	1332	1463	1608	1780	1981	2928

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[4] Alberta Bureau of Statistics' latest projections (see Table A-11).

Age distributions, as has already been mentioned, could not readily be determined for individual college regions. However, examination of the percentages of regional populations in high schools confirms the popular beliefs about the relative average ages of persons in the eight regions.

The Oil and Gas Conservation Board projections were adopted for the purpose of analysing regional college enrolments in subsequent sections of this study.

REGIONAL GRADE 12 ENROLMENTS

In Chapter 2, the analysis of high school enrolments in terms of both cohort survival and of the size of the 18 year old population led to the conclusion that the survival rate of the cohort from grade 1 through to grade 12 is presently the best base for predicting grade 12 enrolments for up to eleven years in the future. Beyond that, the size of the grade 12 class is more safely calculated as a fixed percentage of the 18-year-old population. This two-pronged methodology fits well with the assumption that most Albertans aged 18-20 years in 1976-77 will have completed high school.

A similar approach was used in this chapter for predicting grade 12 enrolments as presented in Tables 12 to 19. In each case (1) grade 12 enrolments to 1981-82 are calculated by applying projected survival rates to the number of grade one students in the cohort; (2) the survival rates are projected from observed rates prior to 1970-71 to a maximum of 110 percent because analysis of provincial data

Table 12

Grade 12 Enrolment Projections for the Edmonton Region Based on Cohort Survival and Regional Population

Year	Original No. in Grade 1 Eleven Yrs. Earlier*	Grade 12 Enrol-ments[1]	Cohort Sur-vival Rate	Total Regional Popula-tion[4]	Grade 12 as a % of Regional Population[5]
1959-60	8,614	4,733	54.9%		
1960-61	9,613	5,517	57.4		
1961-62	9,391	4,868	51.9	585,000	0.83
1962-63	9,392	6,273	66.8		
1963-64	10,875	7,213	66.3		
1964-65	11,624	9,182	79.0		
1965-66	11,914	9,820	82.4		
1966-67	12,270	9,918	80.8	655,000	1.51
1967-68	12,587	10,937	86.9		
1968-69	13,164	11,671	88.7		
1969-70	14,039	12,707	90.5		
1970-71	15,170	14,346	94.6	716,000	2.00
1971-72	14,729	14,361[2] (15,006)[3]	97.5	732,000	2.05
1972-73	15,561	15,639	100.5		
1973-74	15,740	16,291	103.5		
1974-75	16,707	17,793	106.5		
1975-76	17,251	18,976	110.0		
1976-77	16,650	18,315 (18,745)	110.0	815,000	2.30
1977-78	16,632	18,295	110.0		
1978-79	16,507	18,158	110.0		
1979-80	17,949	19,744	110.0		
1980-81	18,018	19,820	110.0		
1981-82	18,502	20,352 (23,639)	110.0	927,000	2.55
2001-02		34,060		1,300,000	2.02

[1] Actual to 1970-71.

[2] Calculated to 1981 by projecting cohort survival rates.

[3] Calculated beyond 1981 as a fixed percentage of the total regional population.

[4] From Table 11.

[5] Projected to increase after 1970-71 by 0.05 percent annually.

*Actual figures from Department of Education records, compiled by D. Cornish.

Table 13

Grade 12 Enrolment Projections for the Medicine Hat Region Based on Cohort Survival and Regional Population

Year	Original No. in Grade 1 Eleven Yrs. Earlier*	Grade 12 Enrolments[1]	Cohort Survival Rate	Total Regional Population[4]	Grade 12 as a % of Regional Population[5]
1959-60	831	398	47.9		
1960-61	882	483	54.8		
1961-62	782	565	72.3	48,000	1.18
1962-63	818	575	70.3		
1963-64	928	584	62.9		
1964-65	971	736	75.8		
1965-66	1,041	768	75.7		
1966-67	1,032	806	78.1	47,000	1.71
1967-68	1,017	897	88.2		
1968-69	1,022	798	78.1		
1969-70	1,184	1,001	84.5		
1970-71	1,148	997	86.8	47,000	2.12
1971-72	1,363	1,227[2] (1,020)[3]	90.0	47,000	2.17
1972-73	1,237	1,150	93.0		
1973-74	1,309	1,257	96.0		
1974-75	1,205	1,193	99.0		
1975-76	1,170	1,193	102.0		
1976-77	1,147	1,204 (1,161)	105.0	48,000	2.42
1977-78	1,083	1,170	108.0		
1978-79	1,109	1,220	110.0		
1979-80	1,170	1,287	110.0		
1980-81	1,041	1,145	110.0		
1981-82	951	1,046 (1,308)	110.0	49,000	2.67
2001-02		1,282		48,000	2.67

[1] Actual to 1970-71

[2] Calculated to 1981 by projecting cohort survival rates.

[3] Calculated beyond 1981 as a fixed percentage of the total regional population.

[4] From Table 11.

[5] Projected to increase after 1970-71 by 0.05 percent annually to 1981-82.

*Actual to 1981-82 as compiled from Department of Education figures by D. Cornish.

Table 14

Grade 12 Enrolment Projections for the Lethbridge Region Based on Cohort Survival and Regional Population

Year	Original No. in Grade 1 Eleven Yrs. Earlier*	Grade 12 Enrolments[1]	Cohort Survival Rate	Total Regional Population[4]	Grade 12 as a % of Regional Population[5]
1959-60	1,636	1,337	81.7		
1960-61	1,772	1,412	79.7		
1961-62	2,189	1,507	68.8	112,000	1.35
1962-63	2,331	1,579	67.7		
1963-64	2,330	1,638	70.3		
1964-65	2,662	1,869	70.2		
1965-66	2,332	1,923	82.5		
1966-67	2,505	1,834	73.2	108,000	1.70
1967-68	2,567	1,877	73.1		
1968-69	2,570	2,026	78.8		
1969-70	2,581	2,170	84.1		
1970-71	2,657	2,260	85.1	111,000	2.04
1971-72	2,849	2,507[2] (2,296)[3]	88.0	112,000	2.05
1972-73	2,844	2,588	91.0		
1973-74	2,723	2,560	94.0		
1974-75	2,672	2,592	97.0		
1975-76	2,481	2,481	100.0		
1976-77	2,486	2,561 (2,436)	103.0	116,000	2.10
1977-78	2,322	2,461	106.0		
1978-79	2,472	2,719	110.0		
1979-80	2,278	2,506	110.0		
1980-81	2,532	2,785	110.0		
1981-82	2,345	2,580 (2,623)	110.0	122,000	2.15
2001-02		2,731		127,000	2.15

[1] Actual to 1970-71.

[2] Calculated to 1981-82 by projecting cohort survival rates (maximum 110 percent).

[3] Calculated for 1981-82 and beyond as a percentage of the total regional population.

[4] From Table 11.

[5] Projected to increase after 1970-71 by 0.01 percent annually.

*Actual to 1981-82 as compiled from Department of Education records by D. Cornish.

Table 15
Grade 12 Enrolment Projections for the Calgary Region
Based on Cohort Survival and Regional Population

Year	Original No. In Grade 1 Eleven Yrs. Earlier*	Grade 12 Enrolments[1]	Cohort Survival Rate	Total Regional Population[4]	Grade 12 as a % of Regional Population[5]
1959-60	5,085	3,124	61.4		
1960-61	5,295	3,390	64.0		
1961-62	5,440	3,680	67.6	382,000	0.96
1962-63	5,556	3,967	71.4		
1963-64	6,605	4,603	69.7		
1964-65	7,121	5,669	79.6		
1965-66	5,995	6,215	103.7		
1966-67	6,591	6,291	95.4	430,000	1.46
1967-68	6,566	7,180	109.4		
1968-69	7,203	7,370	102.3		
1969-70	7,967	8,311	104.3		
1970-71	7,927	8,894	112.9	481,000	1.85
1971-72	8,999	9,899[2] (9,386)[3]	110.0	494,000	1.90
1972-73	9,589	10,548	110.0		
1973-74	10,124	11,136	110.0		
1974-75	9,986	10,985	110.0		
1975-76	9,876	10,864	110.0		
1976-77	10,301	11,331 (12,148)	110.0	565,000	2.15
1977-78	10,610	11,671	110.0		
1978-79	10,748	11,823	110.0		
1979-80	11,441	12,585	110.0		
1980-81	10,858	11,835	109.0		
1981-82	11,603	12,531 (15,480)	108.0	645,000	2.40
2001-02		23,904		996,000	2.40

[1] Actual to 1970-71.

[2] Calculated to 1981-82 by projecting cohort survival rates (maximum 110 percent).

[3] Calculated for 1981-82 and beyond as a percentage of the total regional population.

[4] From Table 11.

[5] Projected to increase after 1970-71 by 0.05 percent annually

*Actual to 1981-82 from Department of Education records as compiled by D. Cornish.

Table 16

Grade 12 Enrolment Projection for the Red Deer Region Based on Cohort Survival and Regional Population

Year	Original No. in Grade 1 Eleven Yrs. Earlier*	Grade 12 Enrolments[1]	Cohort Survival Rate	Total Regional Population[4]	Grade 12 as a % of Regional Population
1959-60	1,716	1,123	65.4		
1960-61	1,883	1,398	74.2		
1961-62	1,846	1,132	61.3	93,000	1.22
1962-63	1,923	1,181	61.4		
1963-64	2,113	1,351	63.9		
1964-65	2,330	1,599	68.6		
1965-66	2,157	1,858	86.1		
1966-67	2,103	1,837	87.4	100,000	1.84
1967-68	2,097	1,571	74.9		
1968-69	2,070	1,963	94.8		
1969-70	2,250	1,995	88.7		
1970-71	2,274	2,202	96.8	105,000	1.75
1971-72	2,587	2,561[2] (1,929)[3]	99.0	106,000	1.82
1972-73	2,607	2,659	102.0		
1973-74	2,493	2,618	105.0		
1974-75	2,574	2,780	108.0		
1975-76	2,421	2,663	110.0		
1976-77	2,358	2,594 (2,452)	110.0	113,000	2.17
1977-78	2,348	2,583	110.0		
1978-79	2,288	2,517	110.0		
1979-80	2,336	2,570	110.0		
1980-81	2,431	2,674	110.0		
1981-82	2,219	2,419 (3,175)	109.0	126,000	2.52
2001-02		4,234		168,000	2.52

[1] Actual to 1970-71.

[2] Calculated to 1981-82 by projecting cohort survival rates (maximum 110 percent).

[3] Calculated for 1981-82 and beyond as a percentage of the total regional population.

[4] From Table 11.

[5] Projected to increase after 1970-71 by 0.07 percent annually.

*Actual to 1981-82 compiled by D. Cornish frm Department of Education records.

Table 17

Grade 12 Enrolment Projections for the Grande Prairie Region
Based on Cohort Survival and Regional Population

Year	Original No. in Grade 1 Eleven Yrs. Earlier*	Grade 12 Enrolments[1]	Cohort Survival Rate	Total Regional Population[4]	Grade 12 as a % of Regional Population[5]
1959-60	917	362	39.5		
1960-61	1,060	405	38.2		
1961-62	1,046	475	45.4	44,000	1.08
1962-63	917	485	52.9		
1963-64	1,119	504	45.0		
1964-65	1,192	610	51.2		
1965-66	1,220	658	53.9		
1966-67	1,176	636	54.1	49,000	1.30
1967-68	1,178	591	50.2		
1968-69	1,296	695	53.6		
1969-70	1,171	859	73.4		
1970-71	1,357	1,230	90.6	53,000	2.32
1971-72	1,411	1,312[2] (1,307)[3]	93.0	54,000	2.42
1972-73	1,449	1,377	95.0		
1973-74	1,492	1,462	98.0		
1974-75	1,511	1,526	101.0		
1975-76	1,515	1,560	103.0		
1976-77	1,559	1,637 (1,781)	105.0	61,000	2.92
1977-78	1,542	1,650	107.0		
1978-79	1,548	1,687	109.0		
1979-80	1,638	1,802	110.0		
1980-81	1,718	1,890	110.0		
1981-82	1,830	2,013 (2,326)	110.0	68,000	3.42
2001-02		3,352		98,000	3.42

[1] Actual to 1970-71.

[2] Calculated to 1981-82 by projecting cohort survival rates (maximum 110 percent).

[3] Calculated for 1981-82 and beyond as a percentage of the total regional population.

[4] From Table 11.

[5] Projected to increase after 1970-71 by 0.10 percent annually.

*Actual to 1981-82 compiled by D. Cornish from Department of Education records.

Table 18

Grade 12 Enrolment Projections for the Vermilion Region Based on Cohort Survival and Regional Population

Year	Original No. in Grade 1 Eleven Yrs. Earlier*	Grade 12 Enrolments[1]	Cohort Survival Rate	Total Regional Population[4]	Grade 12 as a % of Regional Population[5]
1959-60	668	116	17.4		
1960-61	635	123	19.4		
1961-62	680	101	14.9	43,000	0.23
1962-63	716	125	17.5		
1963-64	803	151	18.8		
1964-65	856	176	20.6		
1965-66	878	335	38.2		
1966-67	888	327	36.8	44,000	0.74
1967-68	817	326	39.9		
1968-69	800	368	46.0		
1969-70	718	386	53.8		
1970-71	854	429	50.2	44,000	0.98
1971-72	825	462[2] (444)[3]	56.0	44,000	1.01
1972-73	830	515	62.0		
1973-74	770	524	68.0		
1974-75	811	600	74.0		
1975-76	546	437	80.0		
1976-77	516	444	86.0	44,000	1.16
1977-78	515	474	92.0		
1978-79	469	460	98.0		
1979-80	490	510	104.0		
1980-81	495	545	110.0		
1981-82	504	554 (563)	110.0	43,000	1.31
2001-02		485		37,000	1.31

[1] Actual to 1970-71.

[2] Calculated to 1981-82 by projecting cohort survival rates (maximum 110 percent).

[3] Calculated for 1981-82 and beyond as a percentage of the total regional population.

[4] From Table 11.

[5] Projected to increase after 1970-71 by 0.03 percent annually.

*Actual to 1981-82 compiled by D. Cornish from Department of Education records.

Table 19

Grade 12 Enrolment Projections for the Fairview Region Based on Cohort Survival and Regional Population

Year	Original No. in Grade 1 Eleven Yrs. Earlier*	Grade 12 Enrol-ments[1]	Cohort Sur-vival Rate	Total Regional Popula-tion[4]	Grade 12 as a % of Regional Population[5]
1959-60	497	198	39.8		
1960-61	535	206	38.5		
1961-62	552	215	38.9	25,000	0.86
1962-63	481	209	43.5		
1963-64	463	213	46.0		
1964-65	619	251	40.5		
1965-66	621	283	45.6		
1966-67	596	288	48.3	29,000	0.99
1967-68	657	278	42.2		
1968-69	717	309	43.1		
1969-70	704	355	50.4		
1970-71	704	463	65.8	32,200	1.44
1971-72	782	547[2] (512)[3]	70.0	33,000	1.55
1972-73	773	572	74.0		
1973-74	753	595	79.0		
1974-75	794	659	83.0		
1975-76	720	634	88.0		
1976-77	749	689 (777)	92.0	37,000	2.10
1977-78	793	769	97.0		
1978-79	802	810	101.0		
1979-80	957	1,014	106.0		
1980-81	972	1,069	110.0		
1981-82	1,013	1,114 (1,087)	110.0	41,000	2.65
2001-02		1,564		59,000	2.65

[1] Actual to 1970-71.

[2] Calcualted to 1981-82 by projecting cohort survival rates (maximum 110 percent).

[3] Calculated for 1981-82 and beyond as a percentage of the total regional population.

[4] From Table 11.

[5] Projected to increase after 1970-71 by 0.11 percent annually.

*Actual to 1981-82 compiled by Dr. Cornish from Department of Education records.

suggested this was a peak level (preceding a diminishing level) caused by nearly all persons 10 years or older in Alberta having completed high school; (3) grade 12 enrolments beyond 1981-82 are calculated by applying the projected percentages of the total regional population in grade 12 each year; (4) this percentage is projected from actual pre-1970 data to 1981 at which point it is held constant since most persons over 18 have completed high school. Thus increases in grade 12 enrolments after 1981-82 are primarily a function of increases in the total population.

Comparisons show that the sum of regional data and projections (Tables 12-19) are nearly equal to provincial data and projections (Tables 6 and 7, Chapter 2). For example:

	Sum of Regions	Province
1969-70 (actual) Grade 12 enrolments	27,784	27,138
1980-81 (actual) Original number in Grade 1	38,967	39,567
1981-82 (projected) Grade 12 enrolments	42,609	44,000
2001-02 (projected) Grade 12 enrolments	71,612	62,000

The largest error--the grade 12 2001-02 enrolment projection--likely occurred because regional projections beyond 1981-82 were made on the basis of *total* regional populations whereas provincial projections were based upon *18 year old* provincial populations. Regional 18 year old populations were not available; however the grade 12 enrolments as percentages of the population imply regional differences in age distribution. For example, when 100 percent cohort survival first occurred, the Edmonton grade 12s were about two percent of the Edmonton region population, while the Vermilion grade 12s accounted for slightly more than one percent of the population. In the Grande Prairie region, the figure was nearly three percent. In the other five regions, the figures were about two percent as in the Edmonton region. On this basis, it might be inferred that the population distribution is skewed toward younger age groups, that the Vermilion region has a proportionately older population, and that the other regions are somewhere between.

In summary, the Edmonton college region's grade 12 enrolments will increase rapidly to 20 thousand by 1981-82. In Medicine Hat region, there will be about one thousand--which is a slight decrease from 1969-70. The Lethbridge regional grade 12 enrolment will remain constant between 1970 and 1981 at approximately 2.5 thousand. The grade 12 enrolment in the Calgary region will increase to 12.5 thousand and at a rate slightly less than that of the Edmonton region. Some decrease is indicated in Red Deer region by 1981-82--2.4 thousand. Both Grande Prairie and Fairview regions' grade 12s will increase rapidly in numbers to two thousand and one thousand, respectively, whereas the grade 12 enrolment in Vermilion was projected to increase slightly from 429 in 1970-71 to 554 by 1981-82.

In all regions except Medicine Hat and Vermilion substantial increases in grade 12 enrolments between 1982 and the year 2002 are projected.

NET GRADE 12 POOLS IN EIGHT REGIONS

As was done provincially in Chapter 2, regional grade 12 pools were calculated by summing grade 12 enrolments for consecutive years during the projection period 1970-71 to 1981-82. (For 2001-02, the projected enrolments were doubled in each region to provide approximation of grade 12 pools). D. Cornish, who laboriously computed grades one and 12 enrolments from Department of Education records on individual school authorities, determined from Alberta Universities Commission reports the number of first year students from each college region who attended one of the provincial universities each year from 1959-60 to 1969-70. Net grade 12 pools were calculated by subtracting the sum of first- and second-year university enrolments* in years n from the sum of grade 12 student enrolments in consecutive years n-2 and n-1.

Since regional projections of first-year university enrolments were not available, the trends in the proportions of university enrolments in the eight college regions were observed for the 1959-60 to 1969-70 period and projected to 1981-82 so that regional net grade 12 pools could be estimated for the latter period as well as for the former (see Table A-23). The size of the net grade 12 pool in each region in 2001-02 was estimated.

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*Second year university enrolments were assumed to be 75 percent of first-year enrolments 1960-61 to 1966-67, 80 percent 1967-68 to 1969-70, 83 percent 1970-71 to 1976-77, 84 percent 1976-77 to 1979-80, and 85 percent in 1980-81 in accordance with assumptions in Universities Commission projections.

Tables 20 to 27 show the calculations of regional net grade 12 pools. Grade 12 pools are shown for every year from 1961-62 to 1981-82; however, net grade 12 pools were calculated only at five-year intervals after 1969-70 because first- and second-year enrolments by students' "home regions" had to be estimated as in Table A-23.

To summarize, net grade 12 pools in eight college regions were calculated to be:

	1976-77	1981-82	2001-02
Edmonton region	27,481	28,632	45,760
Medicine Hat region	2,165	2,305	2,374
Lethbridge region	3,083	2,749	1,109
Calgary region	12,339	13,488	28,970
Red Deer region	5,001	4,863	7,681
Grande Prairie region	2,864	3,438	5,781
Vermilion region	816	929	730
Fairview region	1,072	1,956	2,790

Table 20*

Projections of College Enrolments in the Edmonton College Region

Year	Gr. 12 Pool[1]	1st & 2nd Yr. Univer. Enrol.[2]	Net Gr. 12 Pool[3]	Full, Part-time Enrol. as % of Net Pool[4]	Projected Full, Part-time Enrol. (Actual 1970-71)[5]	Extension Enrol. as % of Total Regional Population[6]	Projected Extension Enrolment (Actual 1970-71)[7]	Total Regional Population[8] x 1000	Projected Total Enrolments[9]	Total Enrol. as % of Population
61-62	10,250	2,553	7,697							
62-63	10,385	2,286	8,099							
63-64	11,141	2,298	8,843							
64-65	13,486	2,585	10,901							
65-66	16,395	2,769	13,626							
66-67	19,002	3,605	15,397	61.1	9,408	3.3	21,615	655	31,023	4.7
67-68	19,738	4,162	15,576	68.1						
68-69	20,855	5,353x	15,502	76.3						
69-70	22,608	7,029	15,579	79.5						
70-71	24,378	8,575	15,803	79.5	12,556	4.5	32,370	717	44,926	6.3
71-72	27,053									
72-73	28,707									
73-74	30,000									
74-75	31,930									
75-76	34,084									
76-77	36,769	9,288	27,481	92.3	25,365	6.5	52,975	815	78,340	9.6
77-78	37,291									
78-79	36,610									
79-80	36,453									
80-81	37,902									
81-82	39,564	10,932	28,632	98.0	28,059	7.4	68,598	927	96,657	11.9
01-02	64,000	18,240	45,760	98.0	44,845	7.5	92,250	1,230	137,095	11.1

*Footnotes for Tables 19 to 27 following Table 27.

Table 21*

Projections of College Enrolments in the Medicine Hat Region

Year	Gr. 12 Pool[1]	1st & 2nd Yr. Univer. Enrol.[2]	Net Gr. 12 Pool[3]	Full, Part-time Enrol. as % of Net Pool[4]	Projected Full, Part-time Enrol. (Actual 1970-71)[5]	Extension Enrol. as % of Total Regional Population[6]	Projected Extension Enrolment (Actual 1970-71)[7]	Total Regional Population[8] x 1000	Projected Total Enrolments[9]	Total Enrol. as % of Population
61-62	881	117	764							
62-63	1,048	105	943							
63-64	1,140	93	1,047							
64-65	1,159	110	1,049							
65-66	1,320	61	1,259							
66-67	1,504	70	1,434	47.9	687	3.3	1,551	47	2,238	4.8
67-68	1,574	230	1,344	53.3	716					
68-69	1,703	194[x]	1,509	59.7	901					
69-70	1,695	214	1,481	62.5	927					
70-71	1,799	221	1,578	62.5	987	4.4	2,077	47	3,064	6.5
71-72	1,998									
72-73	2,224									
73-74	2,317									
74-75	2,407									
75-76	2,450									
76-77	2,386	221	2,165	72.3	1,565	6.5	3,120	48	4,685	9.8
77-78	2,397									
78-79	2,374									
79-80	2,390									
80-81	2,507									
81-82	2,432	127	2,305	76.8	1,770	7.4	3,626	49	5,396	11.0
01-02	2,500	211	2,289	76.8	1,758	7.5	3,600	48	5,358	11.3

*Footnotes following Table 27.

Table 22*

Projections of College Enrolments in the Lethbridge Region

Year	Gr. 12 Pool[1]	1st & 2nd Yr. Univer. Enrol.[2]	Net Gr. 12 Pool[3]	Full, Part-time Enrol. as % of Net Pool[4]	Projected Full, Part-time Enrol. (Actual 1970-71)[5]	Extension Enrol. as % of Total Regional Population[6]	Projected Extension Enrolment (Actual 1970-71)[7]	Total Regional Population[8] x 1000	Projected Total Enrolments[9]	Total Enrol. as % of Population
61-62	2,749	151	2,598							
62-63	2,919	221	2,698							
63-64	3,086	173	2,913							
64-65	3,217	231	2,986							
65-66	3,507	222	3,285							
66-67	3,792	205	3,587	51.1	1,683	3.3	3,564	108	5,247	4.9
67-68	3,757	632	3,125	56.9						
68-69	3,711	1,748[x]	1,963	63.8						
69-70	3,903	1,463	2,440	66.7						
70-71	4,196	1,500	2,696	66.7	1,798	4.5	4,942	111	6,740	6.1
71-72	5,430									
72-73	4,767									
73-74	4,095									
74-75	5,148									
75-76	5,152									
76-77	5,073	1,990	3,083	77.2	2,380	6.5	7,540	116	9,920	10.8
77-78	5,042									
78-79	5,021									
79-80	5,180									
80-81	5,225									
81-82	5,291	2,542	2,749	82.0	2,254	7.4	9,028	122	11,282	12.4
01-02	5,300	4,191	1,109	82.0	909	7.5	10,350	138	11,259	14.1

*Footnotes following Table 27.

Table 23*

Projections of College Enrolments in the Calgary Region

Year	Gr. 12 Pool[1]	1st & 2nd Yr. Univer. Enrol.[2]	Net Gr. 12 Pool[3]	Full, Part-time Enrol. as % of Net Pool[4]	Projected Full, Part-time Enrol. (Actual 1970-71)[5]	Extension Enrol. as % of Total Regional Population[6]	Projected Extension Enrolment (Actual 1970-71)[7]	Total Regional Population[8] x 1000	Projected Total Enrolments[9]	Total Enrol. as % of Population
61-62	6,514	1,405	5,109							
62-63	7,070	1,493	5,577							
63-64	7,647	1,782	5,865							
64-65	8,570	1,743	6,827							
65-66	10,272	2,035	8,237							
66-67	11,884	2,245	9,639	105.1	10,131	3.3	14,190	430	24,321	5.7
67-68	12,506	7,529	4,977							
68-69	13,471	6,302[x]	7,169							
69-70	14,550	7,139	7,411							
70-71	15,681	8,088	7,593	137.2	10,415	4.5	21,771	480	32,186	6.7
71-72	17,205									
72-73	18,793									
73-74	20,447									
74-75	21,684									
75-76	22,121									
76-77	21,849	9,510	12,339	158.8	19,594	6.5	36,725	565	56,319	10.0
77-78	22,195									
78-79	23,002									
79-80	23,494									
80-81	24,408									
81-82	24,420	10,932	13,488	168.6	22,741	7.4	47,656	644	70,397	10.9
01-02	47,000	18,030	28,970	168.6	48,843	7.5	74,700	996	123,543	12.4

*Footnotes following Table 27.

Table 24*

Projections of College Enrolments in the Red Deer Region

Year	Gr. 12 Pool[1]	1st & 2nd Yr. Univer. Enrol.[2]	Net Gr. 12 Pool[3]	Full, Part-time Enrol. as % of Net Pool[4]	Projected Full, Part-time Enrol. (Actual 1970-71)[5]	Extension Enrol. as % of Total Regional Population[6]	Projected Extension Enrolment (Actual 1970-71)[7]	Total Regional Population[8] x 1000	Projected Total Enrolments[9]	Total Enrol. as % of Population
61-62	2,521	327	2,194							
62-63	2,530	340	2,190							
63-64	2,313	326	1,987							
64-65	2,532	228	2,304							
65-66	2,950	180	2,770							
66-67	3,457	207	3,250	34.3	1,115	3.3	3,300	100	4,415	4.4
67-68	3,695	355	3,340							
68-69	3,410	353[x]	3,057							
69-70	3,534	437	3,097							
70-71	3,958	541	3,417	44.8	1,532	4.4	4,655	105	6,187	5.9
71-72	4,157									
72-73	4,763									
73-74	5,220									
74-75	5,277									
75-76	5,398									
76-77	5,443	442	5,001	51.8	2,591	6.5	7,345	113	9,936	8.8
77-78	5,257									
78-79	5,177									
79-80	5,100									
80-81	5,087									
81-82	5,244	381	4,863	55.0	2,675	7.4	9,324	126	11,999	9.5
01-02	8,100	419	7,681	55.0	4,225	7.5	12,600	168	16,825	10.0

*Footnotes following Table 27.

Table 25*

Projections of College Enrolments in the Grande Prairie Region

Year	Gr. 12 Pool^1	1st & 2nd Yr. Univer. Enrol.^{2}	Net Gr. 12 Pool^3	Full, Part-time Enrol. as % of Net Pool^4	Projected Full, Part-time Enrol. (Actual 1970-71)^5	Extension Enrol. as % of Total Regional Population^6	Projected Extension Enrolment (Actual 1970-71)^7	Total Regional Population^8 x 1000	Projected Total Enrolments^9	Total Enrol. as % of Population
61-62	767	119	648							
62-63	880	100	780							
63-64	960	105	855							
64-65	989	112	877							
65-66	1,114	98	1,016							
66-67	1,268	133	1,135	59.0	670	3.3	1,617	49	2,287	4.7
67-68	1,294	92	1,202							
68-69	1,227	95^x	1,132							
69-70	1,286	184	1,102							
70-71	1,554	273	1,281	76.7	982	4.5	2,363	53	3,345	6.3
71-72	2,089									
72-73	2,542									
73-74	2,689									
74-75	2,839									
75-76	2,988									
76-77	3,086	222	2,864	89.1	2,552	6.5	3,965	61	6,517	10.7
77-78	3,197									
78-79	3,287									
79-80	3,337									
80-81	3,489									
81-82	3,692	254	3,438	94.6	3,252	7.4	5,032	68	8,284	12.2
01-02	6,200	419	5,781	94.6	5,469	7.5	7,350	98	12,819	13.1

*Footnotes following Table 27.

Table 26*

Projections of College Enrolments in the Vermilion Region

Year	Gr. 12 Pool^1	1st & 2nd Yr. Univer, Enrol.^{2}	Net Gr. 12 Pool^3	Full, Part-time Enrol. as % of Net Pool^4	Projected Full, Part-time Enrol. (Actual 1970-71)^5	Extension Enrol. as % of Total Regional Population^6	Projected Extension Enrolment (Actual 1970-71)^7	Total Regional Population^8 x 1000	Projected Total Enrolment^9	Total Enrol. as % of Population
61-62	239	103	136							
62-63	224	98	126							
63-64	226	112	114							
64-65	276	224	52							
65-66	327	221	106							
66-67	511	228	283	73.4	207	3.3	1,452	44	1,659	3.8
67-68	662	243	419							
68-69	653	160^x	493							
69-70	694	232	462							
70-71	754	316	438	95.7	419	4.4	1,934	44	2,553	5.3
71-72	815									
72-73	891									
73-74	977									
74-75	1,039									
75-76	1,124									
76-77	1,037	221	816	110.8	904	6.5	2,860	44	3,764	8.6
77-78	881									
78-79	918									
79-80	1,479									
80-81	970									
81-82	1,055	126	929	117.8	1,094	7.4	3,182	43	4,276	9.9
01-02	940	210	730	117.8	860	7.5	2,775	37	3,635	9.8

*Footnotes follow Table 27.

Table 27*

Projections of College Enrolments in the Fairview Region

Year	Gr. 12 Pool^{1}	1st & 2nd Yr. Univer. Enrol.^{2}	Net Gr. 12 Pool^{3}	Full, Part-time Enrol. as % of Net Pool^{4}	Projected Full, Part-time Enrol. (Actual 1970-71)^{5}	Extension Enrol. as % of Total Regional Population^{6}	Projected Extension Enrolment (Actual 1970-71)^{7}	Total Regional Population^{8} x 1000	Projected Total Enrolment^{9}	Total Enrol. as % of Population
61-62	404	65	339							
62-63	421	60	361							
63-64	424	70	354							
64-65	422	58	364							
65-66	464	58	406							
66-67	534	67	467	42.3	198	3.3	957	29	1,155	4.0
67-68	571	76	495							
68-69	566	86^{x}	480							
69-70	587	104	483							
70-71	664	118	546	55.5	303	4.7	1,504	32	1,807	5.6
71-72	818									
72-73	1,010									
73-74	1,119									
74-75	1,167									
75-76	1,254									
76-77	1,293	221	1,072	64.0	686	6.5	2,405	37	3,091	8.4
77-78	1,323									
78-79	1,458									
79-80	1,579									
80-81	1,824									
81-82	2,083	127	1,956	67.9	1,328	7.4	3,034	41	4,362	10.6
01-02	3,000	210	2,790	67.9	1,894	7.5	4,425	59	6,319	10.7

*Footnotes on following page.

Footnotes for Tables 20 to 27

[1] Grade 12 pool for any year is the sum of the two previous years' grade 12 enrolments.

[2] First-year university enrolments are the number of *those students completing grade 12 in the region* who went on to an Alberta university. (First-year enrolments were compiled by D. Cornish). Second year university enrolments were estimated on the bases of observed retention rates to 1967-70 and projected retention rates (Universities Commission, 1970) to 1981:

1960-61 to 1966-67 - 75 percent
1967-68 to 1969-70 - 80 percent
1970-71 to 1976-77 - 83 percent
1977-79 to 1979-80 - 84 percent
1980-81 and beyond - 85 percent

[3] The net grade 12 pool is defined as the difference between the grade 12 pool, and first- and second-year university enrolments in a given year.

[4] Actual to 1970-71. Participation rates for other years were assumed proportionate to those for the province as listed in Table 9. (Eg. 70.0 percent in 1970-71). Conversion proportions:

Edmonton : 79.5 divided by 70.0 = 1.14
Medicine Hat : 62.5 divided by 70.0 = 0.89
Lethbridge : 66.7 divided by 70.0 = 0.95
Calgary : 137.2 divided by 70.0 = 1.96
Red Deer : 44.8 divided by 70.0 = 0.64
Grande Prairie : 76.7 divided by 70.0 = 1.10
Vermilion : 95.7 divided by 70.0 = 1.37
Fairview : 55.5 divided by 70.0 = 0.79

[5] Actual 1970-71 from Table A-24. For other years, calculated by multiplying Column 3 times 4.

[6] Actual to 1970-71. Participation rates for other years were assumed proportionate to those for the province as determined from Table 9, e.g. 4.5 percent in 1970-71). Conversion proportions:

Edmonton : 4.5 divided by 4.5 = 1
Medicine Hat : 4.4 divided by 4.5 = 1
Lethbridge : 4.5 divided by 4.5 = 1
Calgary : 4.5 divided by 4.5 = 1
Red Deer : 4.4 divided by 4.5 = 1
Grande Prairie : 4.5 divided by 4.5 = 1
Vermilion : 4.4 divided by 4.5 = 1
Fairview : 4.7 divided by 4.5 = 1

[7] Actual in 1970-71. For other years, calculated by multiplying

THE PERCENTAGE OF THE NET GRADE 12 POOL ENROLLING IN COLLEGES AS FULL-TIME OR PART-TIME STUDENTS

Provincially, this ratio was projected to grow from 53.6 percent in 1966-67 to 86 percent by 1981-82 and beyond based on five years of historical data found in Table A-16. Regionally, trends were much more difficult to identify. Therefore, the actual enrolment as a percentage of the actual pool size in 1970-71 was calculated for each region and assumed to increase proportionately to the provincial values referred to immediately above. Column 4 of Tables 20 to 27 reveals the results of this procedure. In Column 5, products of these percentages and corresponding numbers of persons in the net grade 12 pool each year are listed. No attempt was made to account for full and part-time enrolments drawn from pools other than the high school pool.

Next, extension enrolments were projected as a percentage of the total regional population on the basis of (1) actual 1971 extension enrolments as percentages of the total population, and (2) the rate of change of the corresponding percentage for the entire province (Table 9, Chapter 1). Actual regional extension enrolments are listed in Column 7; extension enrolments as percentages of the total regional population are listed in Column 9 of Tables 20 to 27.

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columns 6 and 8.

[8] Source: Table 11, Chapter 3.

[9] Total enrolments are the sum of full and part-time enrolments plus extension enrolments--Columns 5 and 7.

[X] Includes University of Lethbridge for the first time.

Finally, total yearly college enrolments in each region were calculated in Column 9 by adding Columns 5 and 7 in each of Tables 20 to 27, and shown as percentages of the total regional populations in Column 10. (Total regional populations are listed in Column 8).

Although somewhat cruder than the provincial college enrolment projections, these regional projections when totalled are quite close to the former (see Table 28). Furthermore, they manifest the differing rates of population and college enrolment growths which could not have been seen had "regional" projections been derived by merely dividing up the provincial projections on the basis of relative regional populations.

Table 28 summarizes the projections of regional college enrolments and compares them--along with average annual rates of increase (1970-81)--to provincial predictions and rates of increase.

The most dramatic increases in full- and part-time enrolments are expected to occur in Fairview and Grande Prairie; and this likely will be due to the catching up in the survival rate of grade 12 students from grade one which seems to be presently taking place.

Of the regions where survival of grade 12 students from grade one was close to the provincial rate in recent years, the Calgary and Edmonton full-time and part-time enrolments are expected to increase most rapidly.

The total (full-time plus part-time plus extension) enrolment in the Edmonton region was predicted as 78 thousand students in 1976, and 97 thousand in 1981. (If the assumptions and methodology used for 1976 and 1981 projections continue to apply until 2001, there will be 137 thousand students in the Edmonton region).

Table 28

Summary of Regional Projections and Comparison of Regional and Provincial Enrolment Projections

Region	Types of Enrolments	(1970-1981) Mean Annual Rate of Increase	ENROLMENT PROJECTIONS[1] Projection Years		
			1976	1981	2001
		%			
Edmonton	Full-Time & Part-Time	(11.2)	25,365	28,059	44,845
	Extension	(10.2)	52,975	68,598	92,250
	Total	(10.5)	78,340	96,657	137,095
Medicine Hat	Full-Time & Part-Time	(7.2)	1,565	1,770	1,758
	Extension	(6.8)	3,120	3,626	3,600
	Total	(6.7)	4,685	5,396	5,358
Lethbridge	Full-Time & Part-Time	(2.3)	2,380	2,254	909
	Extension	(7.5)	7,540	9,028	10,350
	Total	(11.4)	9,920	11,282	11,259
Calgary	Full-Time & Part-Time	(10.8)	19,594	22,741	48,843
	Extension	(10.8)	36,725	47,656	74,700
	Total	(10.8)	56,319	70,397	123,543
Red Deer	Full-Time & Part-Time	(7.3)	2,591	2,675	4,225
	Extension	(8.9)	7,345	9,324	12,600
	Total	(8.5)	9,936	11,999	16,825
Grande Prairie	Full-Time & Part-Time	(21.0)	2,552	3,252	5,469
	Extension	(10.3)	3,965	5,032	7,350
	Total	(13.8)	6,517	8,284	12,819
Vermilion	Full-Time & Part-Time	(14.6)	904	1,094	860
	Extension	(5.7)	2,860	3,182	2,775
	Total	(5.9)	3,764	4,276	3,635
Fairview	Full-Time & Part-Time	(31.2)	686	1,328	1,894
	Extension	(9.3)	2,405	3,034	4,425
	Total	(13.1)	3,091	4,362	6,319
TOTAL OF REGIONAL PROJECTIONS	Full-Time & Part-Time		55,637	63,173	108,868
	Extension		116,935	149,480	208,050
	Total		172,572	212,653	316,918
PROVINCIAL PROJECTIONS[2]	Full-Time & Part-Time	(13.8)	61,906	73,083	74,420
	Extension	(9.3)	114,963	145,782	218,443
	Total	(10.6)	176,869	218,865	292,863

[1] Source: Tables 20-27; (these are head counts).

[2] Source: Provincial Summary, Table 9.

The 1976 and 1981 projected total enrolments for the remaining seven regions were calculated to be 4,685 and 5,396 in Medicine Hat; 9,920 and 11,282 in Lethbridge; 56,319 and 70,397 in Calgary; 9,936 and 11,999 in Red Deer; 6,517 and 8,284 in Grande Prairie; 3,764 and 4,276 in Vermilion; and, 3,091 students in the Fairview region.

PROJECTIONS OF SELECTED INSTITUTIONAL OR PROGRAM ENROLMENTS IN COLLEGE REGIONS

In Chapter 2, subsystem projections were derived from total college system projections by applying provincial growth rates to actual subsystem enrolments.

Similarly, in this section of the paper, enrolments in selected colleges or selected college programs in each region are projected by applying regional growth rates to actual 1970-71 enrolment figures. Where available, projections made by individuals from the colleges, themselves, were provided to facilitate comparisons of internal projections with those prepared during the course of this study.

Assumptions

It is important to note that the following institutional projections required the following assumptions: (1) *colleges and college programs will continue as discrete organizations over the projection period and any enlargement will be due to the addition of program offerings or the increasing sizes of existing programs to accommodate increasing student demands.* (That is, the possible amalgamation of two or more colleges was not accounted for in the projections of college enrolments except as noted); (2) *The availability of physical facilities will not severely hinder colleges' ability to meet student demand for educational places*; (3) *Partialled out enrolments will increase proportionately to regional enrolments as projected.*

In some cases, there was sufficient evidence to waive the first of the above assumptions, and the institutional projections in this section of the paper were attempted in view of the following organizational changes:

1. A.V.C. Edmonton will become part of Grant MacEwan College before 1976-77.

2. NAIT (Edmonton) will become a college in the Public College system before 1976-77.

3. AVC Calgary will become part of Mount Royal College before 1976-77.

4. SAIT (Calgary Region) will become a college in the Public College system before 1976-77.

5. The Olds Agricultural and Vocational College will become a college in the Public College subsystem before 1976-77.

6. The Vermilion Agricultural College will be subsumed by a multi-campus college in the Public College subsystem before 1976-77.

7. The Fairview Agricultural College will become a college in the Public College subsystem before 1976-77.

8. Hospital-based nursing programs in all regions will be absorbed by Public Colleges before 1981-82.

Projections

Tables 29 to 36 summarize institutional program enrolment projections by region, and compare these with internal projections that were available.

SUMMARY OF CHAPTER 3

Inspection of the institutional and program enrolment projection reveals that assumption #(3), page 78--although required--may be unacceptable in terms of the 2001-02 projections.

Nevertheless, the projections of *total* regional enrolments in Tables 20 to 27 seem to offer useful *approximations* for at least the years 1976 and 1981, and should be of some interest.

Also interesting was the finding that (in spite of the caution with which projections for individual colleges must be regarded) totalling regional projections produced figures very comparable to those independently derived at the provincial level in the previous chapter (for example, note Table 28).

Several assumptions were required in order to complete regional projections on the basis of often limited regional data on population age distributions, university enrolments and historical enrolments, in individual colleges or programs. These are reviewed in the summary chapter of this study (pages xv and xvi).

Table 29

Enrolment Projections for Selected Colleges
or College Programs in the Edmonton Region
(and Comparisons with Other Projections*)

College or College Programs		Actual Enrolments[1]	Projected Full- and Part-time Enrolments[2] (headcounts)		
		1970-71	1976-77	1981-82	2001-02
Grant MacEwan					
College	288**		(3,995)	(7,500)	(11,987)
Other[A]	(288)**				
(AVC Edmonton[3])	1,531				
(Nursing Program)[3]	928	2,747	5,550	6,138	9,809
Nursing Aide Program		301	608	672	1,075
Nursing Orderly Program		186	376	416	665
NAIT		3,464	6,997	7,739	12,367
Other[B]		(3,464)	(10,429)	(n/a)	(n/a)
Apprenticeship		4,178	8,440	9,335	14,917
Forestry School		20	40	45	71

*Other projections, to which those of the present study are compared, were those prepared by other agencies--usually the institution, itself.

**Extrapolated from preliminary estimates by MacEwan College officials who project 480 to 500 students in 1971-72 and 5,000 to 10,000 by 1981-82.

[A] Other projections to 1981 from MacEwan College; 2001-02 figure calculated from 1981-82 one using the increase factors of this study (footnote 2).

[B] Other projections from NAIT Administration (See Table A-18).

[1] Source: Table A-24.

[2] Projections calculated on basis of increase factors for the whole region: 1970-71 to 1976-77 : 102 percent total increase,
1976-77 to 1981-82 : 10.6 percent total increase,
1981-82 to 2001-02 : 59.8 percent total increase. (From Table 20).

[3] Will become part of Grant MacEwan College.

Table 30

Enrolment Projections for Selected Colleges or College Programs in the Medicine Hat Region

College or College Programs		Actual Enrolments[1]	Projected Full- and Part-time Enrolments[2] (headcounts)		
		1970-71	1976-77	1981-82	2001-02
Medicine Hat College	666	682	1,084	1,225	1,262
Nursing Program	16				
Apprenticeship		268	426	482	496

Table 31

Enrolment Projections for Selected Colleges of College Programs in the Lethbridge Region

College or College Program		Actual Enrolments[1]	Projected Full- and Part-time Enrolments[3] (headcounts)		
		1970-71	1976-77	1981-82	2001-02
Lethbridge Community College	954	1,160	1,531	1,445	578
Hospital-Based Nursing	206				
Apprenticeship		638	842	800	320

---

[1] Source: Table A-24.

[2] Projections based on regional increase factors from Table 21:
1970-71 to 1976-77 : 59 percent increase,
1976-77 to 1981-82 : 13 percent increase,
1981-82 to 2001-02 : 3 percent increase.

[3] Projections based on regional increase factors from Table 22:
1970-71 to 1976-77 : 32 percent increase,
1976-77 to 1980-81 : -5 percent increase,
1980-81 to 2001-02 :-60 percent increase.

Table 32

Enrolment Projections for Selected Colleges
or College Programs in the Calgary Region
(and Comparisons with Other Projections)

College or College Program		Actual Enrolments[1]	Projected Full- and Part-time Enrolments[2] (headcounts)		
		1970-71	1976-77	1981-82	2001-02
Mount Royal College	2,803	4,564	8,580	9,953	21,399
(AVC Calgary)	1,131				
(Nursing Program)	630				
SAIT		2,324	4,369	5,068	10,896
Other[A]		(2,324)	(4,500)		
Olds Agricultural College		364	684	793	1,705
Nursing Orderly School		22	41	48	103
Nursing Aide School		331	622	722	1,552
Apprenticeship		2,810	5,283	6,128	13,175

[1] Source: Table A-24.

[2] Projections based on regional increase factors from Table 23:
1970-71 to 1976-77 : 88 percent increase,
1976-77 to 1981-82 : 16 percent increase,
1981-82 to 2001-02 : 115 percent increase.

[A] From SAIT administration's projections 1971-72 to 1975-76 (extrapolated to 1976-77).

Table 33

Enrolment Projections for Selected Colleges or College Programs in the Red Deer Region

College or College Programs		Actual Enrolments[1] 1970-71	Projected Full- and Part-time Enrolments[2] (headcounts) 1976-77	1981-82	2001-02
Red Deer College	761	795	1,344	1,384	2,186
Nursing Program	34				
AVC Hobbema		44	74	77	121
Apprenticeship		600	1,014	1,044	1,650

Table 34

Enrolment Projections for Selected Colleges or College Programs in the Grande Prairie Region

College or College Programs	Actual Enrolments[1] 1970-71	Projected Full- and Part-time Enrolments[3] (headcounts) 1976-77	1981-82	2001-02
Grande Prairie College	519	1,349	1,714	2,862
AVC Grouard	158	411	522	871
Apprenticeship	305	793	1,007	1,682

[1] Source: Table A-24.

[2] Projections based on Red Deer regional increase factor from Table 24:
1970-71 to 1976-77 : 69 percent increase,
1976-77 to 1981-82 : 3 percent increase,
1981-82 to 2001-02 : 58 percent increase.

[3] Projections based on Grande Prairie regional increase factors from Table 25:
1970-71 to 1976-77 : 160 percent increase,
1976-77 to 1981-82 : 27 percent increase,
1981-82 to 2001-02 : 67 percent increase.

Table 35

Enrolment Projections for Selected Colleges or College Programs in the Vermilion Region

College or College Programs	Actual Enrolments[1]	Projected Full- and Part-time Enrolments[2] (headcounts)		
	1970-71	1976-77	1981-82	2001-02
Vermilion Agricultural College	169	365	442	349
Apprenticeship	250	540	653	516

Table 36

Enrolment Projections for Selected Colleges or College Programs in the Fairview Region

College or College Programs	Actual Enrolments[1]	Projected Full- and Part-time Enrolments[3] (headcounts)		
	1970-71	1976-77	1981-82	2001-02
Fairview Agricultural College	109	246	478	640
Apprenticeship	194	430	851	1,140

[1] Source: Table A-24.

[2] Projections based on Vermilion regional increase factors from Table 26:
1970-71 to 1976-77 : 116 percent increase,
1976-77 to 1981-82 : 21 percent increase,
1981-82 to 2001-02 : -21 percent increase.

[3] Projections based on Fairview regional increase factors from Table 27:
1970-71 to 1976-77 : 126 percent increase,
1976-77 to 1981-82 : 94 percent increase,
1981-82 to 2001-02 : 34 percent increase.

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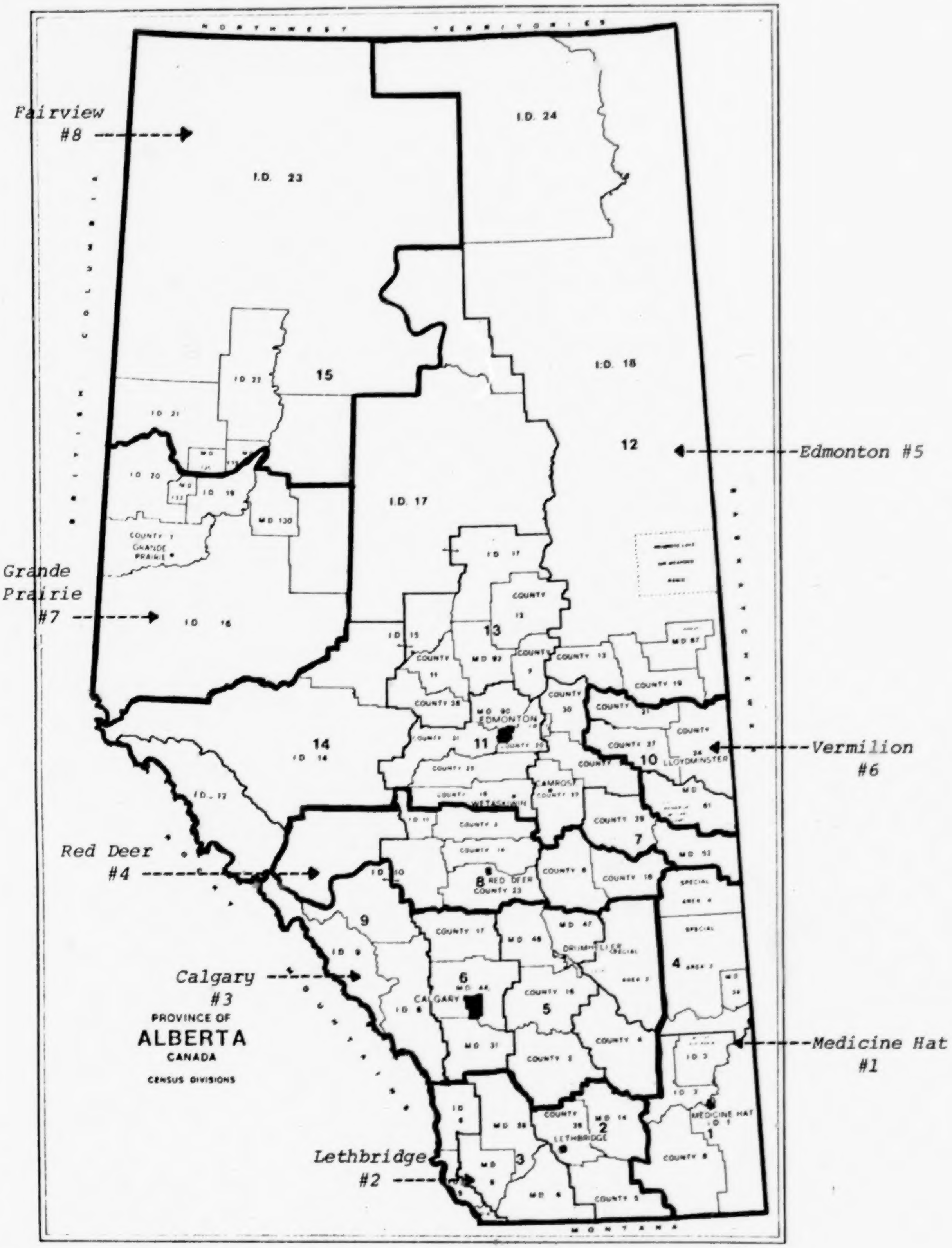
APPENDIX A

Figure A-1*
Eight College Regions in Alberta


NORTHWEST TERRITORIES
Fairview
#8
I.D. 24
I.D. 23
I.D. 22
15
I.D. 21
I.D. 20
I.D. 19
M.D. 130
COUNTY 1
GRANDE PRAIRIE
Grande Prairie
#7
I.D. 16
I.D. 18
12
Edmonton #5
I.D. 17
I.D. 15
13
14
I.D. 14
I.D. 12
EDMONTON
11
10
LLOYDMINSTER
Vermilion
#6
CAMROSE
WETASKIWIN
7
Red Deer
#4
8
RED DEER
9
I.D. 9
Calgary
#3
6
CALGARY
5
DRUMHELLER
4
PROVINCE OF
ALBERTA
CANADA
CENSUS DIVISIONS
Medicine Hat
#1
MEDICINE HAT
1
2
LETHBRIDGE
3
Lethbridge
#2
MONTANA

*Detailed description of each region provided by left-hand columns of Tables A-1 to A-8; adapted from Hanson (1968).

Table A-1

The Edmonton College Region

Census Division	1961	1966	1971*	1981**
C.D. 11 (ALL)				
Cities, towns, villages				
Metropolitan Edmonton	324,657	386,661	435,503	625,754
Wetaskiwin	5,300	6,008	6,586	8,187
Calmar	700	600	797	304
Devon	1,418	1,283	1,446	1,235
Drayton Valley	3,854	3,352	3,714	3,085
Fort Saskatchewan	2,972	4,152	5,734	7,296
Leduc	2,356	2,856	4,070	4,128
Lodgepole	508	207	(207)[1]	(207)[1]
Morinville	935	995	1,251	1,123
Stony Plain	1,311	1,397	1,686	1,889
Betula Beach	7	--[2]	Nil	--
Bon Accord	--	147	322	--
Breton	428	447	447	465
Crystal Springs	13	13	13	13
Edmonton Beach	20	41	147	85
Entwhistle	411	345	329	252
Gibbons	192	230	566	312
Golden Says	--	6	14	--
Itaska Beach	2	1	2	0
Kapasiwin	2	--	--	--
Lakeview	12	2	8	--
Legal	524	572	565	684
Mameo Beach	142	103	109	48
Millet	403	418	480	440
New Serepta	184	173	202	150
Point Allison	6	7	7	10
Seba Beach	113	155	163	231
Silver Beach	14	31	24	64
Spruce Grove	465	598	2,706	1,012
Thorsby	491	583	608	825
Warburg	285	407	453	691
Total-Cities, towns, villages	347,725	411,790	468,159	658,490

Continued....

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*Provincial Planning Branch, 1971 population figures.

**Provincial Planning Branch, projections for 1981.

[1] Figures in parentheses were not available from etiher of the above two sources and were assumed to be equal to the ones in the preceding column.

[2] No figures are given because villages were unincorporated for the year above the column in which the dash is shown (--). However, populations in unincorporated areas are included in the totals for municipal districts, improvement districts, or counties.

Table A-1 (Continued)

The Edmonton College Region

Census Division	1961	1966	1971*	1981**
(C.D. 11...)				
Rural, unicorporated				
I.D. #77	2,384	2,022	(2,022)	1,478
County Parkland #31	9,238	8,846	11,171	8,382
M.D. Sturgeon #90	17,837	15,926	15,926	14,756
County Wetaskiwin #10	8,701	8,435	8,435	7,656
County Strathcona #20	12,075	16,185	21,894	26,843
County Leduc #25	10,647	10,294	10,294	8,653
Total-Rural, unincorporated	60,882	61,708	69,742	67,768
Indian Reserves	2,072	2,555	3,462[1]	5,569
TOTAL-C.D. 11	410,679	476,053	541,363	731,827
C.D. 7 (PART)				
Cities, towns, villages				
Alliance	291	291	291	285
Amisk	127	134	125	146
Czar	196	222	197	312
Daysland	539	632	630	848
Forestburg	677	669	709	776
Galahad	231	174	174	78
Heisler	214	214	199	214
Hughenden	294	274	251	284
Hardisty	582	597	626	629
Killam	552	866	878	1,524
Lougheed	217	252	252	335
Provost	1,022	1,328	1,502	2,098
Sedgewick	655	760	758	1,042
Strome	311	239	239	113
Total-Cities, towns, villages	5,908	6,652	6,831	8,684
Rural, unincorporated				
M.D. Provost #52	3,328	2,944	2,944	1,950
M.D. Flagstaff #62 (Cty 29)	6,355	5,977	5,977	4,792
Total-Rural, unincorporated	9,683	8,921	8,921	6,742
TOTAL-C.D. 7	15,591	15,573	15,752	15,426

Continued ...

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[1] 1971 figures based on Provincial Planning Branch's estimated annual increase factor of 7.5 percent.

Table A-1 (continued)

The Edmonton College Region

Census Division	1961	1966	1971*	1981**
C.D. 10 (PART)				
Cities, towns, villages				
Andrew	601	525	508	368
Bruderheim	299	290	358	244
Camrose	6,939	8,362	8,903	12,531
Chipman	174	183	166	193
Lamont	705	835	835	1,136
Mundare	603	564	590	501
Holden	556	503	503	424
Ryley	469	438	469	369
Tofield	905	952	1,035	1,143
Viking	1,043	1,146	1,203	1,572
Bashaw	614	697	772	869
Bawlf	203	220	220	180
Bittern Lake	76	80	90	97
Edberg	179	167	296	145
Ferintosh	174	156	150	103
Hay Lakes	233	196	203	134
New Norway	263	220	228	135
Rosalind	--	222	174	(285)
Total-Cities, towns, villages	14,036	15,756	16,703	20,429
Rural, unincorporated				
M.D. Lamont #82	6,754	5,872	(5,872)[1]	3,110
County Beaver #9	6,476	6,009	6,009	4,706
County Camrose #22	9,041	8,285	8,285	6,076
Elk Island National Park	69	63	(63)	(63)
Total-Rural, unincorporated	22,340	20,229	20,229	13,955
TOTAL-C.D. 10	36,376	35,985	36,932	34,384
C.D. 12 (ALL)				
Cities, towns, villages				
Bonnyville	1,736	2,237	2,529	3,514
Cold Lake	1,307	1,289	1,242	1,298
Elk Point	692	726	771	909
Fort McMurray	1,186	2,614	6,681	5,503
Grande Centre	1,493	1,731	2,217	2,246
Lac La Biche	1,314	1,490	1,743	2,313
St. Paul	2,823	3,543	4,241	5,658
Smoky Lake	626	871	1,075	1,420

CONTINUED...

Table A-1 (Continued)

The Edmonton College Region

Census Division	1961	1966	1971*	1981**
(C.D. 12 cities --)				
Bonnyville Beach	0	1	Nil	(1)
Glendon	315	350	350	424
Plamondon	0	195	220	(200)
Vilna	400	344	344	252
Warspite	153	119	119	41
Waskatenau	305	274	254	222
Total-Cities, towns, villages	12,350	15,784	21,786	24,001
Rural, unincorporated				
I.D. #85	338	347	(347)	373
M.D. Bonnyville #87	10,209	10,979	12,738	13,847
I.D. #101	1,951	1,825	(1,825)	1,638
I.D. #102	4,840	4,926	(4,926)	4,926
I.D. #121	323	309	(309)	335
County Smoky Lake #13	4,913	4,028	4,028	1,602
County St. Paul #19	7,421	6,710	6,710	4,545
Wood Buffalo National Park	86	231	(231)	(231)
I.D. #143	1,650	1,792	(1,792)	2,592
Total-Rural, unincorporated	31,731	31,147	32,906	30,089
Indian Reserves	3,229	3,704	3,907[1]	4,676
TOTAL-C.D. 12	47,310	50,635	58,599	58,766
C.D. 13 (ALL)				
Cities, towns, villages				
Athabasca	1,487	1,551	1,829	1,889
Barrhead	2,286	2,592	2,718	3,745
Mayerthorpe	663	916	1,042	1,512
Redwater	1,135	1,041	1,303	811
Westlock	1,838	2,685	3,316	4,818
Alberta Beach	135	143	290	180
Boyle	346	437	498	591
Castle Island	0	0	Nil	0
Clyde	259	256	243	249
Fort Assiniboine	216	187	182	125
Island Lake	12	9	9	4
Nakamun Park	0	2	5	(4)
Onoway	302	375	473	590
Radway	183	158	158	104
Ross Haven	0	17	15	(15)
Sandy Beach	4	20	10	54
Sangudo	325	314	360	313

CONTINUED...

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[1] 1971 figure based on Provincial Planning Branch's estimated annual increase factor of 1.1 percent.

Table A-1 (continued)

The Edmonton College Region

Census Division	1961	1966	1971*	1981**
(C.D. 13 cities--)				
Sunset Point	14	18	28	26
Thorhild	312	430	506	475
Val Quentin	--	8	30	(30)
West Cove	--	6	6	(6)
Yellowstone	--	3	3	(3)
Total-Cities, towns, villages	9,517	11,168	13,024	15,544
Rural, unincorporated				
M.D. Westlock #92	7,864	7,378	7,378	5,832
I.D. #107	1,571	1,565	(1,565)	1,503
I.D. #108	636	629	(629)	524
I.D. #122	613	424	(424)	94
County Thorhild #7	5,096	4,324	4,324	2,263
County Barrhead #11	5,759	5,467	5,467	4,562
County Athabasca #12	6,792	6,147	6,147	4,188
County Lac Ste. Anne #28	7,151	6,687	6,687	5,801
Total-Rural, unincorporated	35,482	32,621	32,621	24,767
Indian Reserves[1]	432	353	385	285
TOTAL-C.D. 13	45,431	44,142	46,030	40,596
C.D. 14 (PART)				
Cities, towns, villages				
Edson	3,198	3,788	4,051	5,593
Hinton	3,529	4,307	4,690	5,990
Whitecourt	1,054	2,279	3,114	4,932
Evansburg	452	472	501	627
Wildwood	479	403	403	263
Total-Cities, towns, villages	8,712	11,249	12,759	17,405
Rural, unincorporated				
I.D. #78	3,484	3,550	3,623	3,816
I.D. #79	667	490	(490)	0
I.D. #95	3,638	3,202	(3,202)	3,453
I.D. #96	430	410	560	896
I.D. #109	2,351	1,457	(1,457)	241
Total-Rural, unincoporated	10,570	9,109	9,332	8,406
TOTAL-C.D. 14	19,282	20,358	22,091	25,811

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[1] 1971 figure based on Provincial Planning Branch's estimated increase factor of 1.8 percent.

Table A-1 (continued)

The Edmonton College Region

Census Division	1961	1966	1971*	1981*
C.D. 15 (PART)				
Cities, towns, villages				
Kinuso	323	376	376	461
Slave Lake	468	1,716	2,059	4,420
Swan Hills	643	1,414	1,414	3,083
Total-Cities, towns, villages	1,434	3,506	3,849	7,964
Rural, unincorporated				
L.D. #96	--	150	(150)	(150)
I.D. #123	279	86	(86)	0
I.D. #124	3,108	2,732	(2,732)	2,062
I.D. #128	769	1,100	(1,100)	1,767
I.D. #129	577	712	(712)	920
I.D. #144	212	84	(84)	0
Total-Rural, unincorporated	4,945	4,864	4,864	4,899
Indian Reserves[1]	1,209	1,551	1,652	2,186
TOTAL-C.D. 15	7,588	9,921	10,365	15,049
C.D. 9 (Jasper National Park)	2,902	2,791	(2,791)	3,114
REGIONAL GRAND	585,159	655,458	733,923	924,973

[1] Indian population apportioned as described in Table B-4. The 1971 figure based on the Provincial Planning Branch's estimated annual increase factor of 1.3 percent.

Table A-2

Medicine Hat College Region

Census Division	1961	1966	1971**	1981**
C.D. 1 (ALL)				
Cities, towns, villages				
Medicine Hat	24,484	25,574	25,713	31,812
Irvine	240	209	209	128
Redcliff	2,221	2,141	2,242	2,290
Bow Island	1,122	1,160	1,165	1,445
Burdett	229	207	219	205
Foremost	561	554	586	638
Total-Cities, towns, villages	28,857	29,845	30,134	36,518
Rural, unincorporated				
County Forty Mile #8	4,716	4,104	4,104	3,340
I.D. #11	4,228	3,792	(3,792)	3,000
I.D. #22	553	472	(472)	301
I.D. #24 (Suffield)	786	645	(645)	441
Total-Rural, unincorporated	10,283	9,013	9,013	7,082
TOTAL-C.D. 3	39,140	38,858	39,147	43,600
C.D. 4 (PART)				
Cities, towns, villages				
Oyen	780	846	954	1,167
Cereal	195	191	219	176
Chinook	114	95	100	47
Consort	557	594	670	529
Empress	405	360	360	283
Veteran	239	278	264	311
Youngstown	321	357	357	420
Total-Cities, towns, villages	2,611	2,721	2,924	2,933
Rural, unincorporated				
M.D. #34 (Acadia)	965	896	896	875
Special Area #3	4,994	4,686	(4,686)	4,694
Total-Rural, unincorporated	5,959	5,582	5,582	5,569
TOTAL-C.D. 4	8,570	8,303	8,506	8,502
REGIONAL GRAND TOTAL	47,710	47,161	47,653	52,102

*Provincial Planning Branch, 1971 population figures.
**Provincial Planning Branch, projections for 1981.

[1] Figures in parentheses were not available from either of the above two sources and were assumed to be equal to the ones in the preceding column.

Table A-3

Lethbridge College Region

Census Division	1961	1966	1971*	1981**
C.D. 2 (PART)				
Cities, towns, villages				
Lethbridge	35,454	37,186	40,856	46,998
Coaldale	2,592	2,541	2,739	3,191
Milk River	801	861	861	1,143
Picture Butte	978	1,013	1,062	1,151
Raymond	2,362	1,950	2,063	1,162
Taber	3,951	4,584	4,694	6,243
Vauxhall	942	934	982	1,189
Barons	345	270	261	113
Coutts	469	427	427	336
Grassy Lake	274	226	209	288
Nobleford	309	345	401	448
Stirling	468	390	416	231
Warner	472	446	446	422
Total-Cities, towns, villages	49,417	51,173	55,417	62,915
Rural, unincorporated				
M.D. Taber #14	7,349	6,871	6,871	6,558
County Warner #5	4,991	4,386	4,386	3,030
County Lethbridge #26	11,184	9,506	9,506	5,077
Total-Rural, unincorporated	23,524	20,763	20,763	14,665
TOTAL-C.D. 2	72,941	71,936	76,180	77,580
C.D. 3 (ALL)				
Cities, towns, villages				
Cardston	2,801	2,721	2,721	2,737
Claresholm	2,143	2,569	3,350	3,528
Fort MacLeod	2,490	2,709	2,750	3,486
Granum	290	295	319	276
Magrath	1,338	1,220	1,233	1,110
Nanton	1,054	940	940	764
Pincher Creek	2,961	2,882	3,337	3,640
Stavely	349	292	338	190
Cowley	127	163	233	140
Glenwood	274	194	194	21
Hill Spring	243	190	190	31
Total-Cities, towns, villages	14,070	14,175	15,605	15,923

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*Provincial Planning Branch, 1971 population figures.

**Provincial Planning Branch, projections for 1981.

Table A-3 (continued)

Lethbridge College Region

Census Division	1961	1966	1971*	1981**
(C.D. 3 continued)				
Rural, unincorporated				
M.D. Cardston #6	4,905	4,259	4,259	2,328
M.D. Pincher Creek #9	3,240	2,739	2,739	1,804
M.D. Willow Creek #26	4,863	4,317	4,317	3,512
Total-Rural, unincorporated	13,008	11,315	11,315	7,644
Indian Reserves[1]	3,889	4,102	4,922	5,127
TOTAL-C.D. 3	30,967	29,592	31,842	28,694
C.D. 9 (PART)				
Cities, towns, villages				
Bellevue	1,323	1,174	1,174	727
Blairmore	1,980	1,779	1,809	1,408
Coleman	1,713	1,507	1,400	1,050
Frank	223	178	178	84
Total-Cities, towns, villages	5,239	4,638	4,561	3,269
Rural, unincorporated				
I.D. #8	424	266	(266)	587
I.D. #10	1,844	1,664	(1,664)	0
I.D. #27	133	132	(132)	143
Total-Rural, unincorporated	2,401	2,062	2,062	730
TOTAL-C.D. 9	7,640	6,700	6,623	3,999
REGIONAL GRAND TOTAL	111,548	108,228	114,645	110,273

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[1] 1971 figures based upon Provincial Planning Branch's estimated annual increase factor of 4.1 percent.

[2] Figures in parentheses were not available from the Provincial Planning Branch and were assumed to be equal to the ones in the preceding column.

Table A-4

Calgary College Region

Census Division	1961	1966	1971*	1981**
C.D. 2 (PART)				
Cities, towns, villages				
Bassano	815	827	855	940
Brooks	2,827	3,354	3,858	4,978
Duchess	218	233	234	259
Rosemary	210	221	211	289
Tilley	257	250	254	241
Total-Cities, towns, villages	4,327	4,885	5,412	6,707
Rural, unincorporated				
County Newell #4	6,038	5,898	5,898	5,277
TOTAL-C.D. 2	10,365	10,783	11,310	11,984
C.D. 5 (ALL)				
Cities, towns, villages				
Drumheller	2,931	3,574	5,240	5,043
Gleichen	426	411	400	338
Strathmore	924	994	1,220	1,269
Three Hills	1,491	1,452	1,452	1,660
Trochu	671	780	731	1,006
Acme	328	335	320	378
Arrowwood	195	174	173	111
Carbon	371	374	367	382
Carmangay	297	246	270	150
Champion	419	357	380	255
Cluny	174	171	74	149
Craigmyle	107	98	65	62
Delia	287	274	286	254
Hussar	213	235	167	325
Linden	--[1]	210	217	217
Lomond	244	215	201	207

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*Provincial Planning Branch, 1971 population figures.

**Provincial Planning Branch, projections for 1981.

[1] No figures are given because villages were unincorporated for the year above the column in which the dash is shown (--). However, populations in unincorporated areas are included in the totals for municipal districts, improvement districts, or counties.

Table A-4 (continued)

Calgary College Region

Census Division	1961	1966	1971*	1981**
(C.D. 5 cities --)				
Milo	167	154	126	139
Morrin	316	272	272	235
Munsun	82	39	52	0
Rockyford	288	281	285	299
Rumsey	123	108	113	90
Standard	266	264	263	279
Torrington	-	130	132	(132)[1]
Vulcan	1,310	1,505	1,612	2,020
Total-Cities, towns, villages	11,630	12,653	14,418	15,000
Rural, unincorporated				
I.D. #42	4,370	3,403	(3,403)	222
M.D. Starland #47	2,907	2,535	2,535	1,833
I.D. Kneehill #48	7,008	6,290	6,290	4,807
County Vulcan #2	5,018	4,330	4,330	2,923
County Wheatland #16	5,570	5,062	5,062	3,974
Total-Rural, unincorporated	24,873	21,620	21,620	13,759
Indian Reserves[2]	1,612	1,714	1,894	2,063
TOTAL-C.D. 5	38,115	35,987	37,932	30,822
C.D. 6 (ALL)				
Cities, towns, villages				
Calgary (metropolitan)	276,165	330,575	398,034	505,281
Black Diamond	1,043	858	955	471
Didsbury	1,254	1,586	1,878	2,271
High River	2,276	2,239	2,621	2,183
Okotoks	1,043	922	1,175	867
Olds	2,433	2,999	3,408	4,543
Sundre	853	831	948	963
Airdrie	524	778	1,033	1,447
Beiseker	360	404	407	513
Blackie	184	156	155	197
Carstairs	665	761	904	1,085
Cayley	146	133	133	111
Cochrane	857	819	1,059	909
Cremona	221	191	192	118

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[1] Figures in parentheses were not available from the Planning Branch. Assumed to be equal to the ones in the preceding column.

[2] 1971 figure based upon the Provincial Planning Branch's estimated annual increase factor of 2.1 percent.

Table A-4 (continued)

Calgary College Region

Census Division	1961	1966	1971*	1981**
(C.D. 6 cities --)				
Crossfield	593	582	618	653
Irricana	167	104	126	0
Longview	--	173	191	(183)
Turner Valley	702	625	780	593
Total-Cities, towns, villages	289,486	344,736	414,617	522,388
Rural, unincorporated				
M.D. Foothills #31	7,896	6,455	6,455	3,567
M.D. Rocky View #44	10,748	8,522	10,433	2,060
County Mountainview #17	9,348	8,656	8,656	7,249
Total-Rural, unincorporated	27,992	23,633	25,544	12,876
Indian Reserves	511	771	1,025[1]	1,337
TOTAL-C.D. 6	317,989	369,140	441,186	536,601
C.D. 9 (PART)				
Cities, towns, villages				
Canmore	--	1,445	1,604	1,929
Ghost Lake	--	--	Nil	0
Total-Cities, towns, villages	0	1,445	1,604	1,929
Rural, unincorporated				
I.D. #33	34	32	(32)	26
I.D. #46	3,076	1,651	(1,651)	0
I.D. #50	41	45	(45)	34
I.D. #51 (Banff National Pk.)	4,101	3,381	(3,381)	2,729
I.D. #58	534	522	(522)	561
Total-Rural, unincorporated	7,786	5,631	5,631	3,350
Indian Reserves[2]	951	908	1,035[3]	2,114
TOTAL-C.D. 9	8,737	7,984	8,270	7,393

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[1] 1971 figure based upon the Provincial Planning Branch's estimated annual increase factor of 6.7 percent.

[2] C.D. #9 Indian population prorated as described in Table B-4.

[3] 1971 figure based upon the Provincial Planning Branch's estimated annual increase factor of 2.7 percent.

Table A-4 (continued)

Calgary College Region

Census Division	1961	1966	1971*	1981**
C.D. 4 (PART)				
Cities, towns, villages				
Hanna	2,645	2,633	2,539	2,933
Total-Cities, towns, villages	2,645	2,633	2,539	2,933
Rural, unincorporated				
Special Area #2	3,805	3,288	(3,285)	2,388
Total-Rural, unincorporated	3,805	3,288	(3,285)	2,388
TOTAL-C.D. 4	6,450	5,921	5,824	5,321
REGIONAL GRAND TOTAL	381,656	429,815	504,522	592,121

Table A-5

Red Deer College Region

Census Division	1961	1966	1971*	1981**
C.D. 7 (PART)				
Cities, towns, villages				
Castor	1,025	1,090	1,103	1,322
Coronation	864	811	1,102	778
Stettler	3,638	3,988	4,263	4,872
Big Valley	461	378	378	356
Botha	112	134	115	180
Donalda	289	271	247	258
Gadsby	98	84	65	68
Halkirk	172	177	177	186
Rochon Sands	28	2	2	0
Total-Cities, towns, villages	6,687	6,935	7,452	8,020
Rural, unincorporated				
County Stettler #6	5,968	5,640	5,640	4,939
County Paintearth #18	3,278	3,227	3,227	2,994
Total-Rural, unincorporated	9,246	8,867	8,867	7,933
TOTAL-C.D. 7	15,933	15,802	16,319	15,953
C.D. 8 (ALL)				
Cities, towns, villages				
Red Deer	19,612	26,171	26,907	45,636
Innisfail	2,270	2,531	2,436	3,473
Lacombe	3,029	3,035	3,228	3,409
Ponoka	3,938	4,421	4,554	6,040
Rimbey	1,266	1,502	1,465	2,238
Rocky Mountain House	2,360	2,446	3,135	3,389
Sylvan Lake	1,381	1,332	1,494	1,459
Alix	631	636	636	689
Bentley	588	637	647	803
Blackfalds	477	729	877	1,386
Bowden	437	610	554	1,049
Caroline	321	294	342	247
Clive	251	238	252	218
Delburne	450	391	391	303
Eckville	580	716	642	1,093
Elnora	214	191	199	158
Gull Lake	40	48	38	66
Mirror	577	433	419	126
Norglenwold	0	23	43	39
Penhold	319	370	430	554
Total-Cities, towns, villages	38,741	46,754	48,689	72,375

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*Provincial Planning Branch, 1971 population figures.
**Provincial Planning Branch, projections for 1981.

Table A-5 (continued)

Red Deer College Region

Census Division	1961	1966	1971*	1981**
(C.D. 8 continued)				
Rural, unincorporated				
I.D. #65	5,532	5,612	(5,612)[1]	5,659
I.D. #68	124	108	(108)	63
County Ponoka #3	8,688	8,392	8,392	7,662
County Lacombe #14	8,725	8,367	8,367	7,811
County Red Deer #23	13,477	12,943	12,943	12,544
Total-Rural, unincorporated	36,546	35,422	35,422	33,739
Indian Reserves[2]	1,246	1,736	2,048	2,746
TOTAL-C.D. 8	76,533	83,912	86,159	108,860
C.D. 9 (PART)				
Cities, towns, villages				
Total-Cities, towns, villages	0	0	0	0
Rural, unincorporated				
I.D. #69	505	179	(179)	0
I.D. #78 (part after 1963)	--[3]	73	(73)	(73)
Total-Rural, unicorporated	505	252	(252)	(73)
Indian Reserves[4]	490	468	534	1,089
TOTAL-C.D. 9	995	720	786	1,162
REGIONAL GRAND TOTAL	93,461	100,434	103,264	125,975

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[1] Figures in parentheses were not available from either of the above two sources and were assumed to be equal to the ones in the preceding column.

[2] 1971 figures based upon Provincial Planning Branch's estimated annual increase factor of 3.6 percent.

[3] No figures are given because villages were unincorporated for the year above the column in which the dash is shown (--). However, populations in unincorporated areas are included in the total for municipal districts, improvement districts, or counties.

[4] C.D. #9 Indian population divided among two regions based upon Provincial Planning Branch's estimated annual increase factor of 2.7 percent.

Table A-6

Grande Prairie College Region

Census Division	1961	1966	1971*	1981**
C.D. 15 (PART)				
Cities, towns, villages				
Grande Prairie City	8,352	11,417	12,054	20,160
Beaverlodge	897	1,083	1,138	1,630
Falher	741	843	971	1,088
High Prairie	1,756	2,241	2,561	3,430
McLennan	1,078	1,104	1,157	1,152
Spirit River	890	1,034	1,130	1,370
Valleyview	1,077	1,827	1,849	3,897
Donnelly	289	249	287	185
Girouxville	318	305	305	275
Hythe	449	445	497	468
Rycroft	500	539	528	683
Sexsmith	531	491	491	538
Wanham	251	235	294	201
Wembly	303	299	321	318
Eaglesham	--[1]	--	242	(242)[2]
Total-Cities, towns, villages	17,432	22,112	23,825	35,637
Rural, unincorporated				
M.D. Smoky River #130	4,094	3,984	3,984	3,701
M.D. Spirit River #133	1,318	1,243	1,243	1,038
County Grande Prairie #1	8,803	8,697	8,697	8,115
I.D. #110	552	472	(472)	555
I.D. #111	353	365	(365)	428
I.D. #125	3,212	3,101	(3,101)	2,900
I.D. #126	2,579	2,726	(2,726)	3,140
I.D. #132	2,646	2,595	(2,595)	2,255
I.D. #134	2,505	2,792	(2,792)	3,275
Total-Rural, unincorporated	26,062	25,975	25,975	25,407
Indian Reserves[3]	665	853	908	1,203
REGIONAL GRAND TOTAL	44,159	48,940	50,708	62,247

*Provincial Planning Branch, 1971 population figures.

**Provincial Planning Branch, projections for 1981.

[1] No figures are given because villages were unincorporated for the year above the column in which the dash (--) is shown. However, populations in unincorporated areas are included in the totals for municipal districts, improvement districts, or counties.

[2] Figures in parentheses were not available from either of above two sources; were assumed to be equal to the ones in the preceding column.

[3] C.D. #15 Indian population divided among three regions including Grande Prairie; see Table B-4. 1971 figure was based upon Provincial Planning Branch's estimated annual increase factor of 1.3 percent.

Table A-7

Vermilion College Region

Census Division	1961	1966	1971*	1981**
C.D. 7 (PART)				
Cities, towns, villages				
Wainwright	3,351	3,867	3,735	5,588
Chauvin	395	362	392	330
Edgerton	295	345	296	438
Irma	425	430	436	460
Total-Cities, towns, villages	4,466	5,004	4,859	6,816
Rural, unincorporated				
M.D. Wainwright #61	4,847	4,454	4,454	3,843
TOTAL-C.D. 7	9,313	9,458	9,313	10,659
C.D. 10 (PART)				
Cities, towns, villages				
Lloydminster (part)	2,944	3,767	4,308	5,975
Two Hills	826	1,056	1,133	1,651
Vegreville	2,908	3,598	3,776	5,304
Vermilion	2,449	2,685	2,949	3,395
Derwent	281	261	225	239
Dewberry	179	198	198	238
Hairy Hill	173	136	136	140
Innisfree	291	314	234	353
Kitscoty	326	364	342	483
Lavoy	131	118	118	98
Mannville	632	683	683	831
Marwayne	379	351	351	328
Minburn	164	143	108	100
Myrnam	441	460	457	506
Paradise Valley	--[1]	174	174	(174)[2]
Willingdon	429	419	387	455
Total-Cities, towns, villages	12,553	14,727	15,579	20,270
Rural, unincorporated				
County Two Hills #21	6,205	5,528	5,528	3,370
County Vermilion River #24	8,862	8,380	7,910	6,940
County Minburn #27	6,181	5,591	5,591	3,846
Total-Rural, unincorporated	21,248	19,499	19,029	14,156
TOTAL-C.D. 10	33,801	34,226	34,608	34,462
REGIONAL GRAND TOTAL	43,114	43,684	43,921	45,085

*Provincial Planning Branch, 1971 population figures.

**Provincial Planning Branch, projections for 1981.

[1] No figures given because villages unincorporated for year above column in which dash (--) shown. Populations in unincorporated areas included in total for municipal, improvement districts, or counties.

[2] Figures in parentheses not available from either of above two sources. Were assumed to be equal to ones in preceding column.

Table A-8

Fairview College Region

Census Division	1961	1966	1971*	1981**
C.D. 15 (PART)				
Cities, towns, villages				
Fairview	1,506	1,884	2,093	2,913
Grimshaw	1,095	1,376	1,147	2,183
High Level	--[1]	708	2,004	(2,004)[2]
Manning	896	1,179	1,322	1,978
Peace River	2,543	4,087	5,384	7,589
Berwyn	347	430	443	616
Hines Creek	398	418	428	483
Nampa	271	288	317	324
Total-Cities town, villages	7,056	10,370	13,138	18,090
Rural, unincorporated				
M.D. Peace #135	2,053	2,223	1,640	2,764
M.D. Fairview #136	1,917	1,745	1,745	1,838
I.D. #131	2,403	2,163	(2,163)	1,824
I.D. #137	174	—[3]	—	—
I.D. #138	3,194	3,251	(3,251)	3,493
I.D. #139	2,772	3,379	(3,379)	4,517
I.D. #145	144	8	(8)	0
I.D. #146	662	852	(852)	1,083
I.D. #147	3,189	3,826	(3,826)	5,873
I.D. #148	86	63	(63)	0
I.D. #149	339	129	(129)	0
Total-Rural, unincorporated	16,933	17,639	17,056	21,392
Indian Reserves[4]	1,148	1,474	1,570	2,077
REGIONAL GRAND TOTAL	25,137	29,483	31,764	41,559

*Provincial Planning Branch, 1971 population figures.
**Provincial Planning Branch, projections for 1981.

[1] No figures given because villages were unincorporated for the year above column in which the dash (--) is shown. However, populations in unincorporated areas included in totals for municipal districts, improvement districts, or counties.

[2] Figures in parentheses were not available from etiher of above two sources; were assumed to be equal to the ones in the preceding column.

[3] I.D. 137 annexed to I.D. 128 in 1964.

[4] C.D. #15 Indian population eas divided among three regions including Fairview; see Table B-3. 1971 figure based on the Provincial Planning Branch's estimated annual increase factor of 1.3 percent.

Table A-9

Alberta 1961-1981 Population Summary*

Region	Subpopulations	1961	1966	1971	1981
EDMONTON					
	Cities, towns, villages	399,682	475,905	543,111	752,517
	Rural, unincorporated	178,535	171,390	181,406	159,740
	Indian reserves	6,942	8,163	9,406	12,716
TOTAL		585,159	655,458	733,923	924,973
MEDICINE HAT					
	Cities, towns, villages	31,468	32,566	33,058	39,451
	Rural, unincorporated	16,242	14,595	14,595	12,651
	Indian reserves	--	--	--	--
TOTAL		47,710	47,161	47,653	52,102
LETHBRIDGE					
	Cities, towns, villages	68,726	69,986	75,583	82,107
	Rural, unincorporated	38,933	34,140	34,140	23,039
	Indian reserves	3,889	4,102	4,922	5,127
TOTAL		111,548	108,228	114,645	110,273
CALGARY					
	Cities, towns, villages	308,088	366,352	438,590	548,957
	Rural, unincorporated	70,494	60,070	61,978	37,650
	Indian reserves	3,074	3,393	3,954	5,514
TOTAL		381,656	429,815	504,522	592,121
RED DEER					
	Cities, towns, villages	45,428	53,689	56,141	80,395
	Rural, unincorporated	46,297	44,541	44,541	41,745
	Indian reserves	1,736	2,204	2,582	3,835
TOTAL		93,461	100,434	103,264	125,975

Continued...

*Sources: Tables A-1 to A-8.

Table A-9 (continued)

Alberta 1961-1981 Population Summary

Region	Subpopulation	1961	1966	1971	1981
GRANDE PRAIRIE					
	Cities, towns, villages	17,432	22,112	23,825	35,637
	Rural, unincorporated	26,062	25,975	25,975	25,407
	Indian reserves	665	853	908	1,203
TOTAL		44,159	48,940	50,708	62,247
VERMILION					
	Cities, towns, villages	17,019	19,731	20,438	27,086
	Rural, unincorporated	26,095	23,953	23,483	17,999
	Indian reserves	--	--	--	--
TOTAL		43,114	43,684	43,921	45,085
FAIRVIEW					
	Cities, towns, villages	7,056	10,370	13,138	18,090
	Rural, unincorporated	16,933	17,639	17,056	21,392
	Indian reserves	1,148	1,474	1,570	2,077
TOTAL		25,137	29,483	31,764	41,559
PROVINCE					
	Cities, towns, villages	894,899	1,050,711	1,215,133	1,606,992
	Rural, unincorporated	419,591	392,303	402,709	339,156
	Indian reserves	17,454	20,189	23,342	30,472
GRAND TOTAL		1,331,944	1,463,203	1,641,184	1,976,620

Table A-10

Oil and Gas Conservation Board Population Projections
By College Regions and Provincially

College Region	C.D.	Base (1966) Population	O.G.C.B. Increase Factors					Projected Populations				
			1971	1976	1981	1986	2001	1971	1976	1981	1986	2001
Edmonton	7(p)[1]	15,573	1.017	1.022	1.032	1.037	1.000	15,838	15,916	16,071	16,149	15,573
	9(p)	2,791	1.049	1.143	1.242	1.341	1.632	2,928	3,190	3,466	3,743	4,555
	10(p)	35,985	1.006	0.990	0.974	0.952	0.818	36,201	35,625	35,049	34,258	29,436
	11	476,053	1.135	1.287	1.492	1.573	2.187	540,320	612,680	710,271	748,831	1,041,128
	12	50,635	1.156	1.302	1.484	1.650	2.138	58,534	65,927	75,142	83,548	108,258
	13	44,142	1.009	0.989	0.968	0.943	0.796	44,539	43,656	42,729	41,626	35,137
	14	20,358	1.108	1.279	1.475	1.662	2.240	22,557	26,038	30,028	33,835	45,602
	15(p)	9,921	1.109	1.242	1.398	1.545	2.011	11,002	12,322	13,870	15,328	19,951
	ALL	655,458						731,919	815,354	926,626	977,318	1,299,640
Medicine Hat	1	38,858	1.005	1.023	1.044	1.062	1.057	39,052	39,752	40,568	41,267	41,073
	4(p)	8,303	1.000	0.979	0.972	0.958	0.859	8,303	8,129	8,071	7,954	7,132
	ALL	47,161						47,355	47,881	48,639	49,221	48,205
Lethbridge	2(p)	71,936	1.042	1.094	1.162	1.236	1.405	74,957	78,698	83,590	88,913	101,070
	3	29,592	1.020	1.010	1.003	0.970	0.882	30,184	29,888	29,681	28,704	26,100
	9(p)	6,700	1.049	1.143	1.242	1.341	1.632	7,028	7,658	8,321	8,985	10,673
	ALL	108,228						112,169	116,244	121,592	126,602	137,843
Calgary	2(p)	10,783	1.042	1.094	1.162	1.236	1.430	11,236	11,797	12,530	13,328	15,420
	4(p)	5,921	1.000	0.979	0.972	0.958	0.859	5,921	5,797	5,755	5,672	5,086
	5	35,987	1.011	0.992	0.981	0.964	0.844	36,383	35,699	35,303	34,691	30,373
	6	369,140	1.171	1.362	1.573	1.802	2.526	432,263	502,769	580,657	665,190	932,448
	9(p)	7,984	1.049	1.143	1.242	1.341	1.632	8,375	9,126	9,916	10,707	13,030
	ALL	429,815						494,178	565,188	644,161	729,588	996,357

Continued...

Table A-10 (continued)

Oil and Gas Conservation Board Population Projections

College Region	C.D.	Base (1966) Population	O.G.C.B. Increase Factors 1971	1976	1981	1986	2001	Projected Populations 1971	1976	1981	1986	2001
Red Deer	7(p)[1]	15,802	1.017	1.022	1.032	1.037	1.000	16,071	16,150	16,308	16,387	19,802
	8	83,912	1.062	1.150	1.293	1.423	1.801	89,115	96,499	108,498	119,407	151,126
	9(p)	720	1.049	1.143	1.242	1.341	1.632	755	823	894	966	1,175
	ALL	100,434						105,941	113,472	125,700	136,760	168,103
Grande Prairie	15(p)	48,940	1.109	1.242	1.398	1.545	2.001	54,294	60,783	68,418	75,612	97,929
Vermilion	7(p)	9,458	1.017	1.022	1.032	1.037	1.000	9,619	9,666	9,761	9,808	9,458
	10(p)	34,226	1.006	0.990	0.974	0.952	0.818	34,431	33,884	33,336	32,583	27,997
	ALL	43,684						44,050	43,550	43,097	42,391	37,455
Fairview	15(p)	29,483	1.109	1.242	1.398	1.545	2.011	32,697	36,618	41,217	45,551	59,290
ALL ALBERTA		1,463,203						1,622,603	1,799,090	2,019,450	2,183,043	2,844,822

Sources: Projection factors from Table A-III of a paper from O.G.C.B. enclosed with a letter to H. Kolesar (Alberta Colleges Commission Chairman), September 4, 1970. Base Populations from D.B.S. as calculated by the Colleges Commission for college regions. See Tables A-1 to A-9.

[1] (p) indicates that only *part* of the population of the census division was included in a college region population because college regions and Census Divisions are not congruent. See Figure 1.

Table A-11

Alberta Population by Selected Age Groups 1966–2002; Percentage of Males in Selected Age Groups and Percentages of Total in Selected Age Groups at Five Year Intervals*

	Populations									
					% male	% of Total				
Age Group	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975
0- 4	173,568	166,466	162,719	160,068	163,073	168,949	176,901	182,428	188,192	194,349
0- 5[1]	210,464	203,261	199,869	197,163	195,550	199,702	206,618	215,813	222,621	229,814
	51.3 14.4					50.7 12.4				
5- 9	179,540	182,552	184,534	185,511	181,243	175,103	168,029	164,273	161,617	164,606
10-14	157,658	163,985	170,137	174,345	178,789	181,260	184,267	186,245	187,219	182,961
15-19	128,999	131,734	135,978	143,085	149,923	158,617	164,922	171,052	175,247	179,677
6-17[2]	378,303	390,410	401,758	413,193	422,816	426,266	425,106	422,524	421,490	422,135
	51.6 25.9					51.0 26.5				
20-24	102,005	109,374	115,133	120,737	126,396	131,154	133,874	138,096	145,166	151,967
18-24[3]	153,003	160,440	166,874	173,392	181,058	189,114	196,268	203,756	213,331	221,611
	49.0 10.5					50.0 11.8				
25-29	92,200	94,385	97,263	99,752	102,830	105,823	113,151	118,878	124,449	130,076
30-34	94,481	93,879	93,480	93,975	95,710	95,756	97,929	100,791	103,267	106,328
35-39	95,496	96,548	97,538	97,373	95,935	96,783	96,186	95,791	96,286	98,009
25-39[4]	282,177	284,812	288,281	291,100	294,475	298,362	307,266	315,460	324,002	334,413
	50.6 19.3					49.6 18.6				
40-44	89,036	90,345	91,851	92,421	95,745	96,304	97,342	98,322	98,157	96,731
45-49	77,885	80,076	82,868	86,810	86,943	88,765	90,048	91,527	92,092	95,358
50-54	67,339	69,433	70,476	71,166	74,175	76,551	78,689	81,412	85,257	85,373
55-59	55,265	56,765	58,461	61,122	62,414	65,040	67,049	68,047	68,721	71,615
40-59[5]	289,525	296,619	303,656	311,519	319,277	326,660	333,128	339,308	344,227	349,077
	50.8 19.8					51.6 20.3				
25-59	571,702	581,431	591,937	602,619	613,752	625,022	640,394	654,768	668,229	683,490
60-64	45,721	47,146	48,363	48,937	50,782	52,216	53,625	55,236	57,750	58,954
65-69	35,195	36,179	37,978	39,809	40,306	41,561	42,851	43,977	44,518	46,185
70-74	27,900	27,926	28,159	28,177	29,365	30,134	30,946	32,478	34,063	34,463
75-79	21,284	21,495	21,400	21,849	21,293	21,654	21,678	21,855	21,931	22,839
80-84	12,704	12,902	13,181	13,541	13,922	14,086	14,206	14,143	14,490	14,094
85-89	5,291	5,566	5,867	6,190	6,255	6,508	6,592	6,747	6,947	7,139
90+	1,636	1,674	1,770	1,834	1,971	2,097	2,189	2,314	2,432	2,470
60-90+[6]	149,731	152,888	156,718	160,337	163,894	168,256	172,087	176,750	182,131	186,144
	52.4 10.2					51.1 10.5				
25-90+	721,433	743,319	748,655	762,956	777,646	793,278	812,441	831,518	850,360	869,634
All Age Groups	1,463,203	1,488,409	1,517,130	1,546,673	1,577,040	1,608,335	1,640,445	1,673,530	1,707,772	1,743,164
						50.7 100.0				

*Source: Alberta Bureau of Statistics "higher most likely" Alberta Population Projections 1967-2006. (1966 is actual).

Continued...

Table A-11 (Continued)

Populations
% Male % of Total

Age Group	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
0- 4	200,855	207,823	214,920	222,134	229,372	236,451	243,220	249,670	255,802	261,375
0- 5[1]	237,465 50.7 13.3	245,474	253,815	262,309	270,974	279,545 50.8 14.1	287,816	295,640	303,169	310,193
5- 9	170,458	178,383	183,888	189,628	195,759	202,238	209,177	216,246	223,432	230,641
10-14	176,832	169,771	166,020	163,369	166,353	172,195	180,105	185,600	191,329	197,450
15-19	182,141	185,137	187,109	188,078	183,829	177,714	170,672	166,938	164,306	167,285
6-17[2]	422,435 58.7 23.7	422,932	423,845	425,852	429,539	433,700 50.7 21.9	439,712	451,810	466,988	484,584
20-24	160,615	166,885	172,981	177,158	181,565	184,017	186,997	188,959	189,920	185,690
18-24[3]	231,002 51.1 13.0	239,593	247,256	252,206	256,665	259,369 50.7 13.3	262,645	259,965	254,633	247,663
25-29	134,805	137,508	141,705	148,733	155,494	164,094	170,330	176,391	180,547	184,931
30-34	109,306	116,594	122,290	127,828	133,421	138,122	140,808	144,981	151,967	158,690
35-39	98,058	100,217	103,060	105,520	108,560	111,521	118,761	124,419	129,917	135,471
25-39[4]	342,169 49.9 19.2	354,319	367,055	382,081	397,475	413,737 50.9 20.9	429,899	445,791	462,431	479,092
40-44	97,577	96,985	96,598	97,090	98,796	98,852	100,989	103,806	106,244	109,255
45-49	95,911	96,926	97,888	97,726	96,318	97,161	96,577	96,200	96,691	98,370
50-54	87,167	88,409	89,845	90,403	93,579	94,123	95,102	96,038	95,880	94,501
55-59	73,921	75,982	78,598	82,295	82,387	84,136	85,317	86,688	87,236	90,275
40-59[5]	354,576 51.3 20.0	358,302	362,929	367,514	371,080	374,272 49.4 18.9	377,985	382,732	386,051	392,401
25-59	696,745	712,621	729,984	749,595	768,555	788,009	807,884	828,523	848,482	871,493
60-64	61,446	63,327	64,259	64,907	67,629	69,830	71,772	74,229	77,705	77,761
65-69	47,510	48,784	50,270	52,570	53,646	55,940	57,635	58,472	59,080	61,552
70-74	35,566	36,663	37,656	38,148	39,562	40,729	41,813	43,117	45,112	46,008
75-79	23,466	24,062	25,251	26,511	26,787	27,680	28,519	29,324	29,743	30,823
80-84	14,378	14,392	14,505	14,615	15,200	15,652	16,014	16,805	17,674	17,816
85-89	7,238	7,282	7,249	7,466	7,236	7,420	7,424	7,479	7,581	7,869
90+	2,596	2,633	2,721	2,823	2,891	2,961	2,972	2,983	3,103	3,019
60-90+[6]	192,200 49.8 10.8	197,143	201,911	207,040	212,951	220,212 49.0 11.1	226,149	323,409	239,998	244,848
25-90+	888,915	909,764	931,895	956,635	981,686	1,008,221	1,034,033	1,060,932	1,088,480	1,116,341
All Age Groups	1,779,814 50.4 100.0	1,817,733	1,856,772	1,896,972	1,938,352	1,980,806 50.3 100.0	2,024,169	2,068,313	2,113,240	2,158,747

Table A-11 (Continued)

Age Group	Populations % Male % of Total							
	1986	1987	1991	1992	1996	1997	2001	2002
0- 4	266,243	270,292	280,725	283,171	256,569	301,202	326,090	333,463
0- 5[1]	316,395 50.8 14.4	321,638	335,734 50.9 13.8	338,557	353,775 50.8 13.2	359,026	387,268 50.8 13.2	395,903
5- 9	237,693	244,436	267,373	271,409	281,802	284,238	297,579	302,191
10-14	203,916	210,843	239,306	246,038	268,933	272,962	283,336	285,768
15-19	173,110	180,993	204,730	211,636	240,010	246,719	269,541	273,556
6-17[2]	499,977 51.0 22.7	515,659	578,465 50.6 23.8	593,256	641,685 50.6 24.0	651,491	684,338 50.7 23.4	692,013
20-24	179,605	172,599	175,036	182,877	206,493	213,362	241,589	248,264
18-24[3]	244,195 50.9 11.1	241,866	252,971 50.1 10.4	263,318	298,347 50.5 11.2	307,967	346,530 50.4 11.8	355,325
25-29	187,369	190,333	182,981	176,014	178,441	186,239	209,723	216,554
30-34	167,241	173,441	190,387	193,334	186,018	179,091	181,512	189,265
35-39	140,134	142,802	169,054	175,211	192,041	194,968	187,692	180,810
25-39[4]	494,744 50.5 22.4	506,576	542,422 50.8 22.3	544,559	556,500 50.3 20.8	560,298	578,927 50.2 19.8	586,629
40-44	112,190	119,364	140,516	143,159	169,159	175,251	191,917	194,813
45-49	98,438	100,541	111,581	118,652	139,458	142,061	167,667	173,658
50-54	95,339	94,767	96,616	98,666	109,456	116,367	136,637	139,180
55-59	90,804	91,729	91,967	91,414	93,246	95,215	105,625	112,293
40-59[5]	396,771 48.7 18.0	406,401	440,680 49.6 18.1	451,891	511,319 50.6 19.2	528,894	601,846 50.3 20.6	619,944
25-59	891,515	912,977	983,102	996,450	1,067,819	1,089,192	1,180,773	1,206,573
60-64	79,443	80,531	85,676	86,522	86,762	86,239	88,042	89,892
65-69	63,596	65,365	72,330	73,287	77,942	78,676	78,916	78,436
70-74	48,018	49,451	54,638	56,158	62,124	62,901	66,874	67,454
75-79	31,769	32,601	37,520	38,608	42,745	43,928	48,568	49,121
80-84	18,446	18,982	21,226	21,764	25,124	25,813	28,671	29,450
85-89	8,130	8,287	9,568	9,827	11,049	11,313	13,119	13,445
90+	3,128	3,127	3,434	3,466	3,981	4,062	4,625	4,720
60-90+[6]	252,530 48.4 11.5	258,344	284,392 49.7 11.7	289,632	309,727 49.4 11.6	312,932	328,815 47.6 11.2	332,518
25-90+	1,144,045	1,171,321	1,267,494	1,286,084	1,377,546	1,402,124	1,509,588	1,539,091
All Age Groups	2,204,578 50.0 100.0	2,250,449	2,434,632 49.9 100.0	2,481,174	2,671,320 49.7 100.0	2,720,571	2,927,687 49.8 100.0	2,982,295

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[1] Early childhood education age group. [2] Elementary-secondary education. [3] Higher education-work age grou

[4] Work-continuing education. [5] Work-continuing education. [6] Work-retirement age group.

Table A-12

Comparisons of College and University Full-Time Enrolment Projections for Alberta, 1971-2001

Source	1971-72	1975-76	1980-81	1985-86	1990-91	2000-01
Seastone[1]:						
Universities	33.6	47.4	58.6	62.6	62.9	99.2
Colleges	14.2	22.0	27.6	29.5	29.6	46.7
Economic Council of Canada[2]:						
Universities	38.0	53.4	66.0			
Colleges	14.2	22.0	27.6			
Alberta Universities Commission[3]	33.6	47.4	58.6			
Alberta Colleges Commission[4]	25.1	31.4				
Task Force[5]:						
Universities	38.0		93.0			
Colleges	14.2		46.5			

[1] Seastone (1971). Based on Universities Commission[3] figures until 1980-81.

[2] Zsigmond and Wenaas (1970). Projections beyond 1980-81 are not available.

[3] Alberta Universities Commission (1970).

[4] Alberta Colleges Commission First Annual Report (1971) and Fenske (1971).

[5] Commission on Educational Planning: Post-Secondary Task Force Report (1971). *Full-time equivalent* enrolments for only 1980-81 were projected.

Table A-13

School Enrolments in Alberta, 1959-1970

School	Grade											
Year	1	2	3	4	5	6	7	8	9	10	11	12
59-60	32,536	30,105	28,378	27,042	26,211	25,903	26,020	22,222	19,161	15,707	13,347	11,291
60-61	34,520	31,765	30,346	28,166	27,070	26,019	26,309	25,042	21,757	16,097	14,021	13,223
61-62	35,555	33,765	31,160	29,864	27,960	26,355	26,371	25,310	24,492	18,204	14,506	14,160
62-63	35,257	34,908	33,048	31,407	29,980	27,765	27,123	25,357	25,104	20,799	16,597	14,692
63-64	36,554	34,504	34,221	32,918	31,319	29,612	28,485	26,219	25,319	21,490	19,314	16,697
64-65	37,241	35,964	33,553	34,188	32,745	30,931	30,185	27,576	26,034	22,116	20,201	20,172
65-66	38,160	36,507	34,708	33,650	33,779	32,270	31,497	29,118	27,618	22,696	20,374	21,781
66-67	38,441	37,395	35,694	35,046	33,277	33,205	33,056	30,019	29,181	24,646	20,963	21,970
67-68	38,550	38,277	36,715	36,084	34,408	33,403	34,239	32,336	29,491	27,172	22,813	22,484
68-69	38,932	37,726	37,230	36,633	35,512	34,194	34,019	33,363	31,121	28,179	25,633	25,199
69-70	39,567	37,850	37,445	36,991	36,599	35,375	34,851	33,482	32,667	30,837	26,631	27,138

SOURCE: Alberta Department of Education Annual Reports.

Table A-14

Percent of Grade 12 Students Receiving Diplomas and Matriculation

1959-69*

	Percent Receiving Diplomas	Percent Receiving Matriculation	Total Percent Diplomas and Matriculation	Percent Other
1958-59	31.7	21.8	53.5	46.5
1959-60	30.4	22.1	52.5	47.5
1960-61	26.6	24.2	50.8	49.2
1961-62	28.6	24.7	53.3	47.7
1962-63	28.1	25.2	53.3	47.7
1963-64	29.3	25.2	54.5	45.5
1964-65	33.8	22.2	56.0	44.0
1965-66	41.9	24.8	66.7	33.3
1966-67	38.4	31.3	69.7	30.3
1967-68	39.7	30.6	70.3	29.7
1968-69	41.3	28.1	69.4	30.6
1969-70	35.8	28.7	64.5	35.5

*Source: Department of Education Annual Report, 1958-1970.

Table A-15

Historical Enrolments in Alberta Public Colleges 1962-71[1]

	GRANDE PRAIRIE[2]					RED DEER				
	Full-time	Part-time	Total	Extension	FTE	Full-time	Part-time	Total	Extension	FTE
1962-63										
1963-64									(24)	
1964-65										
1965-66										130
1966-67	66	44	110	200	77	(136)[3]	(8)	(144)	(24)	159
1967-68	111	65	176	227	122	(186)	(12)	(198)	(32)	219
1968-69	190	155	345	214	224	(330)	(20)	(350)	(57)	390
1969-70	181	166	347	143	260	(509)[3]	(31)	(540)	(88)	600
1970-71	227	292	519	122	335	717	44	761	124	850

	MOUNT ROYAL					LETHBRIDGE				
	Full-time	Part-time	Total	Extension	FTE	Full-time	Part-time	Total	Extension	FTE
1962-63					748					150
1963-64					944					178
1964-65					1377					307
1965-66					1499					401
1966-67	(1093)	(589)	(1682)		1401	(484)	(31)	(515)	(1656)	535
1967-68	(1075)	(579)	(1654)		1396	(780)	(50)	(830)	(2667)	860
1968-69	(1148)	(618)	(1766)		1490	(664)	(42)	(706)	(2238)	734
1969-70-	(1184)	(637)	(1821)		1520	(915)	(58)	(973)	(3000)	1010
1970-71	1822	981	2803		2350	897	57	954	3066	994

	MEDICINE HAT					TOTAL				
	Full-time	Part-time	Total	Extension	FTE	Full-Time	Part-time	Total	Extension	FTE
1962-63										
1963-64										
1964-65										
1965-66					95					
1966-67	(83)	(37)	(120)	(36)	79	(1862)	(709)	(2571)	(1916)	2251
1967-68	(184)	(82)	(266)	(80)	170	(2336)	(788)	(3124)	(3006)	2767
1968-69	(363)	(163)	(526)	(158)	337	(2695)	(998)	(3693)	(2667)	3175
1969-70	(377)	(169)	(546)	(164)	350	(3166)	(1061)	(4227)	(3395)	3740
1970-71	460*	206*	666	200	429*	4123	1580	5703	3512	4958

[1] Main Sources: "Operations Data" forms submitted by colleges to the Commission. (1971); "Enrolment and Operating Costs," Department of Education,(1968) for 1962 to 1968.

[2] Source: Letter from President Dr. Anderson, August 19, 1971.

[3] Figures in parentheses are estimates based on the 1960-70 F.T.E. ratios from year to year.

*Discrepancy in source documents.

Table A-16

Enrolments in the College System
1965-1971

College or Program	Type of Enrolment[1]	Year 1966-67	1967-68	1968-69	1969-70	1970-71
+Public College[2]	Full-time	1,862	2,336	2,695	3,166	4,123
	Part-time	709	788	998	1,061	1,580
	FT+PT Total	2,571	3,124	3,693	4,227	5,703
	Extension	1,916	3,006	2,667	3,395	3,512
	FTE	2,251	2,767	3,175	3,740	4,958
+Institutes of Technology	Full-time	3,717	4,525	5,426	5,371	5,788
	Extension	9,704	10,698	11,607	11,511	14,165
	Correspondence (SAIT)	1,920	2,179	2,455	2,801	3,079
	Extens. + Corresp.[3]	11,624	12,877	14,062	14,311	17,244
AVCs, Alberta Petroleum Industry Training Center, Rehabilitation of disabled persons	Full-time Head Count	1,580	2,761	4,047	3,260	(3,300)[4]
+Agricultural Colleges	Full-time	437	456	598	713	642
	Extension	49	120	36	59	661
	One-time Contacts	-	20,247	25,984	32,404	30,901
+Nursing Schools[5], Hospitals[6]	Full-time	2,042	2,096	1,978	1,967	1,814
+Nursing Aides, Orderlies	Full-time	(425)	(710)	(750)	(770)	840
+Apprenticeship	Head-count (part-time)[7]					
	(1st Year)[8]	1,890	1,952	2,026	2,082	2,150
	(2, 3, 4th Years)	6,050	6,243	6,504	6,658	7,093
	Total	7,940	8,195	8,530	8,740	9,243*

+See "Totals, #1." (Colleges drawing substantially from the Grade 12 pool).

Continued...

Table A-16 (Continued)

College or Program	Type of Enrolment[1]	Year 1966-67	 1967-68	 1968-69	 1969-70	 1970-71
+Private Colleges*	Full-time	903	1,153	1,373	1,601	(1,600)
+Forestry School[9]	Full-time	16	17	20	22	20
	Extension, Short Course, Field training	609	517	613	676	1,235
University Extension*	Extension[10]	(11,870)	(13,300)	(14,800)	(16,300)	17,847
Adult Extension in High Schools*	Extension[10]	(21,910)	(24,200)	(26,500)	(28,800)	31,117
Parks Recreation, Community Services, etc.*	(Very short course)[11]	(26,000)	(31,700)	(37,450)	(43,200)	49,427
Proprietary Colleges*	Full-time	(1,050)	(1,255)	(1,460)	(1,665)	1,870
	Part-time	(700)	(800)	(900)	(1,015)	1,146
	Total	1,750	2,055	2,360	2,680	3,016
TOTALS						
+1. Colleges drawing from the Net Grade 12 pool (excluding proprietary colleges)	Full-time	9,402	11,293	12,840	13,610	14,827
	Part-time	8,649	8,983	9,528	9,801	10,823
	Total	18,051	20,276	22,368	23,411	25,650
2. All the above plus colleges enrolling mainly adult students	Full-time	10,982	14,054	16,887	16,870	18,127
	Part-time	8,649	8,983	9,528	9,801	10,823
	Total	19,631	23,037	26,415	26,671	28,950
3. All extension enrolments	Total	47,978	54,020	58,678	63,541	71,616
4. Headcount: Full-time plus part-time plus extension	Total	67,609	77,057	85,093	90,212	100,566

Continued...

Table A-16 (Continued)

College or Program	Type of Enrolment	Year 1966-67	1967-68	1968-69	1969-70	1970-71
5. All very short term enrolments	Total	26,000	51,947	63,434	75,604	80,328
6. Headcount: Full-time plus part-time plus extension plus very short course enrolments	Total	93,609	129,004	148,527	165,816	180,894
7. Headcount as in 6, including full- and part-time headcounts in proprietary schools	Total	95,359	131,059	150,887	168,496	183,910

NOTES:

[1] Headcounts unless FTE is specified.

[2] Source: Table A-16 (Head count prorated from 1970-71 data except for Grande Prairie).

[3] Correspondence considered as adult extension.

[4] Figures in brackets estimated, or based upon estimates.

[5] Source: Alberta Association of Registered Nurses submission to CEP (April, 1970), page 13.

[6] Excludes nursing program enrolments in public colleges.

[7] Considered as part-time because of on-the-job nature of apprenticeship training.

[8] Source: Fred Whittle, Director of Apprenticeship and Tradesmen's Qualification Branch, Alberta Department of Labor.

[9] Data supplied by P.J. Murphy, Head Training Branch, Alberta Department of Lands and Forests.

[10] Assumed to have increased at a rate proportionate to that at the Institues of Technology (42% from 1966-67 to 1970-71).

[11] Assumed to increase at same rate as very short courses in Agricultural Colleges (55% from 67-8 to 70-1).

[12] Proprietary college enrolments assumed to have increased at same rate as private colleges (78% over 4 years)

*Source: Fisher (1971). NOTE: Other Sources: Tables A-17 to A-21.

Table A-17

Projections and Historical Enrolments for the Agricultural Colleges in Alberta: 1961-62 to 1970-71*

Year	OLDS Full Time	OLDS Short Course	VERMILION Full Time	VERMILION Short Course	FAIRVIEW Full Time	FAIRVIEW Short Course	T O T A L Full Time	T O T A L Short Course	Other Enrolment Estimates A^2	Other Enrolment Estimates B^3	Projections[1]
1961-62	133	--	130	--	80	--	343	--			
1962-63	149	--	162	--	93	--	404	--			
1963-64	135	--	158	--	88	--	381	--			
1964-65	153	16	147	10	126	--	426	26			
1965-66	199	18	196	16	132	17	527	51			
1966-67	180	19	125	25	132	5	437	49			
1067-68	212	90	119	26	125	4	456	120			
1968-69	303	--	144	24	151	12	598	36			669
1969-70	413	--	142	59	158	--	713	59	(645)		712
1970-71	364	204	169	333	109	124	642	661		(602)	763
1971-72											808
1972-73											852
1973-74											910

*Source: July 8, 1971 Letter to N. Clarke from J. E. Hawker, Director of Extension and Colleges Division of the Alberta Department of Agriculture. The above include portions of the numbers of persons--see table at right--with whom contact was made or to whom service was provided by the college on a one-time-only or short-term basis.

TOTAL CONTACTS AT AG. COLLEGES

Year	Olds	Vermilion	Fairview
67-68	7,288	6,722	6,237
68-69	12,983	7,734	5,267
69-70	13,321	10,845	8,238
70-71*	14,170	9,483	7,248

*Until May 31, 1971.

[1] Dept. of Ag. projections, 1968 (full-time).

[2] Dept. of Ag.: result of different counting method.

[3] Fisher, Master Planning Monograph #3 (full-time).

Table A-18

Projections and Historical Enrolments for the Northern Alberta Institute of Technology 1964-65 to 1970-71*

	First Year Daytime Enrolments in Programs--			Total[1] Daytime Enrolment[3]	Total[1] Extension Enrolment
Year	2 Years	1 Year	Less Than 1 Year		
1964-65	609	153	170	1,288	2,281
1965-66	656	208	147	1,733	3,865
1966-67	1,121	232	146	2,236	5,629
1967-68	1,339	232	170	2,678	6,154
1968-69	1,532	280	202	3,118	6,852
1969-70	1,508	330	200	3,046	7,318
1970-71	1,678	387	199	3,464	8,753
1971-72				4,473	9,064
1972-73				5,482	9,376
1973-74				6,491	9,687
1974-75				7,500	10,000[2]
1975-76				8,509	10,312

*Source: Data supplied on request by F. Williamson, Coordinator, search and Development, N.A.I.T. (Letter from F. Williamson to N. Clarke, August 13, 1971).

[1] Total exclude apprentices and students as shown on Table A-16.

[2] The 1974-75 projection provided by N.A.I.T. 1971-72 figures are interpolations, 1975-76 is an extrapolation by the Alberta Colleges Commission.

[3] Head counts. Head counts, full-time equivalents, and other types of counts which are much more reliable than those in 1964 to 1968 will be available for 1969-70 and beyond.

Table A-19

Projections and Historical Enrolments for the Southern Alberta Institute of Technology 1964-65 to 1970-71*

Year	First Year Daytime Enrolments in Programs-- More Than 2 Years	2 Years	1 Year	Less Than 1 Year	Total[1] Daytime Enrolment	Total[1] Extension Enrolment	Total[1] Corresp. Enrolment
1964-65	109	563	66	112	1,234	2,776	1,450
1965-66	235	551	55	111	1,235	3,251	1,572
1966-67	319	504	32	79	1,481	4,075	1,920
1967-68	326	715	58	98	1,847	4,544	2,179
1968-69	355	872	98	95	2,308	4,755	2,455
1969-70	305	841	124	42	2,325	4,193	2,801
1970-71	278	1,134	168	182	2,324	5,412	3,079
1971-72					3,033	5,953	3,387
1972-73					3,220	6,548	3,725
1973-74					3,538	7,202	4,098
1974-75					3,805	7,922	4,508
1975-76					4,128	8,714	4,959

*Source: Data supplied on request by G. W. Carter, Assistant Director of Technical Education, Alberta Department of Education, Vocational Education Division, Southern Alberta Institute of Technology. (Letter from G. Carter to N. Clarke, June 28, 1971).

[1] Totals exclude apprentices and students as shown on Table A-16.

Table A-20

Historical Enrolments in Selected Programs of Alberta Technical and Vocational Training[1]

Institution or Program	1966-67	1967-68	1968-69	1969-70
Alberta Vocational Centre, Edmonton	550	1,023	1,868	1,136
Alberta Vocational Centre, Calgary	710	1,030	1,359	1,168
Alberta Vocational Centre, Ft. McMurray	276	308	295	414
Alberta Petroleum Industry Training Center, Edmonton	0	321	315	168
Rehabilitation of Disabled Persons	44	79	210	374
TOTALS[2]	1,580	2,761	4,047	3,260

[1] Enrolments by head counts. Source: Alberta Department of Education Annual Reports, 1967 to 1970.

[2] Totals *exclude* students in public institutions--colleges; totals *exclude* persons trained in industry under joint auspices of the Alberta Department of Education (Technical and Vocational Division), and the Federal government because the latter is taking over this venture entirely; totals *exclude* apprentices. See Table A-16.

Table A-21

Historical Enrolments in Private Colleges*

	1961-62	1962-63	1963-64	1964-65	1965-66	1966-67	1967-68	1968-69	1969-70
Camrose	31	24	43	78	73	85	90	197	231
Concordia	20	18	22	21	28	19	14	24	30
St. Jean	46	51	113	120	132	127	136	143	230
Canadian Union	139	142	125	100	77	122	113	109	110
Alberta College**	(410)	(425)	(450)	(460)	(500)	(550)	(800)	(900)	(1000)
TOTALS	646	660	653	779	810	903	1,153	1,373	1,601

*Sources: 1961 to 1967-68 D.B.S., "Survey of Higher Education, Part I: Fall Enrolments in Universities and Colleges."
1968 to 1970, Alberta Colleges Commission compilation of data from various sources.

**Estimated.

Table A-22

Total Undergraduate University Enrolment Projections
to 1980-81 (1000's)

Year	Alberta & Athabasca			Calgary			Lethbridge			Total		
	Low	Med.	High	Low	Med.	High	Low	Med.	High	Low	Med.	High
70-71	16.3	17.0	17.6	7.8	8.3	8.6	1.4	1.5	1.5	25.6	26.8	31.2
71-72	17.4	18.9	20.0	8.5	9.3	10.0	1.5	1.6	1.7	27.3	29.8	35.6
72-73	18.6	20.7	22.5	9.3	10.6	11.7	1.6	1.8	2.0	29.5	33.1	40.5
73-74	19.7	22.6	24.9	10.4	12.1	13.5	1.8	2.0	2.2	31.9	36.7	45.6
74-75	20.9	24.1	27.0	11.2	13.1	14.9	1.9	2.2	2.4	33.9	39.4	49.9
75-76	22.0	25.3	28.5	11.9	14.0	16.0	2.0	2.3	2.6	35.8	41.7	53.3
76-77	22.9	26.6	29.9	12.6	14.9	17.0	2.1	2.4	2.7	37.6	43.8	56.4
77-78	23.8	27.7	31.3	13.2	15.6	17.9	2.1	2.5	2.8	39.1	45.8	59.5
78-79	24.5	28.7	32.6	13.8	16.3	18.7	2.2	2.6	3.0	40.5	47.7	62.4
79-80	25.0	29.5	33.6	14.2	16.9	19.5	2.3	2.7	3.1	41.5	49.1	64.9
80-81	25.4	30.2	34.3	14.5	17.4	20.0	2.4	2.8	3.2	42.2	50.3	66.9

Table A-23

Comparison of Provincial Net Grade 12 Pool to Totals of Regional Grade 12 Pools and Projections of Regional First- and Second-Year University Enrolments Beyond 1969-70

Data to be Compared	Year	COLLEGE REGIONS								TOTAL	PROVINCE
		Edmonton	Medicine Hat	Lethbridge	Calgary	Red Deer	Grande Prairie	Vermilion	Fairview		
Grade 12 Pool[1]	1966-67	19,002	1,504	3,792	11,884	3,457	1,268	511	534	41,952	41,953
	1969-70	22,608	1,695	3,903	14,550	3,534	1,286	694	587	47,104	47,683
	1976-77	36,769	2,386	5,073	21,849	5,443	3,086	1,037	1,293	76,936	77,421
	1981-82	39,564	2,432	5,291	24,420	5,244	3,692	1,055	2,083	83,781	86,349
	2001-02	64,000	2,500	5,300	47,000	8,100	6,200	940	3,000	137,040	121,734
First & Second Year University Enrolment	1966-67[2]	3,605 (53.3%)	70 (1.0)	205 (3.0)	2,245 (33.2)	207 (3.1)	133 (2.0)	228 (3.4)	67 (1.0)	6,760 (100)	8,249
	1969-70[2]	7,029 (41.8%)	214 (1.3)	1,463 (8.7)	7,139 (42.5)	437 (2.6)	184 (1.1)	232 (1.4)	104 (0.6)	16,802 (100)	13,745
	1976-77*	9,288 (42.0%)	221 (1.0)	1,990 (9.0)	9,510 (43.0)	442 (2.0)	222 (1.0)	221 (1.0)	221 (1.0)	22,115 (100)	22,115
	1981-82*	10,932 (43.0%)	127 (0.5)	2,542 (10.0)	10,932 (43.0)	381 (1.5)	254 (1.0)	126 (0.5)	127 (0.5)	25,423 (100)	25,423
	2001-02*	18,240 (43.5%)	211 (0.5)	4,191 (10.0)	18,030 (43.0)	419 (1.0)	419 (1.0)	210 (0.5)	210 (0.5)	41,930 (100)	41,930
Net Pool	1966-67	15,397	1,434	3,587	9,639	3,250	1,135	283	467	35,192	33,704
	1969-70	15,579	1,481	2,440	7,411	3,097	1,102	462	483	32,055	33,938
	1976-77	27,481	2,165	3,083	12,339	5,001	2,864	816	1,072	54,821	55,306
	1981-82	28,632	2,305	2,749	13,488	4,863	3,438	929	1,956	58,361	60,926
	2001-02	45,760	2,374	1,109	28,970	7,681	5,781	730	2,790	95,110	79,804

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[1] From Tables 20 to 26. [2] From Tables 20 to 26. *Percentages projected.

Table A-24

Regional College Enrolments, 1970-71

Region	College or College Program[1]	Enrolments[2] Full- Plus Part-time	Enrolments[2] Extension
EDMONTON	Forestry School	20	1,235
	Camrose Lutheran College*	297	20
	N.A.I.T.	3,464	8,753
	Alberta College*	1,000	
	Nursing Orderly School	186	
	Nursing Aide School	301	
	Hospital Based Nursing	928	
	AVC, Edmonton	1,531	
	Other AVC's in region	499	
	Alta. Petroleum Industry Training	152	
	Apprenticeship[3]	4,178	
	Other Extension Programs[4]		22,362
	TOTALS	12,556	32,370
MEDICINE HAT	Medicine Hat College	666	200
	Hillcrest Christian College	37	8
	Hospital Based Nursing	16	
	Apprenticeship[3]	268	
	Other Extension Programs[4]		1,869
	TOTALS	987	2,077

Continued...

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*Private Colleges.

[1] Colleges and programs in one of the eight college regions as determined by Fisher (1971: Tables 2-9).

[2] Enrolment Data from various sources; mainly Tables A-15, A-16, A-17, A-18, A-19, A-20, A-21; also Fisher (1971), Tables 2-9.

[3] Total apprenticeship enrolment apportioned among 8 regions on the bases of the proportion of the total 1971 population in each region (See Note, end of Table).

[4] Extension enrolments apportioned among 8 regions as above.

Table A-24 (continued)

Regional College Enrolments, 1970-71

Region	College or College Program[1]	Enrolments[2] Full- Plus Part-time	Enrolments[2] Extension
LETHBRIDGE	Lethbridge Community College	954	3,066
	Hospital Based Nursing	206	
	Apprenticeship[3]	638	
	Other Extension[4]		1,876
	TOTAL	1,798	4,942
CALGARY	S.A.I.T.	2,324	3,079
	Mount Royal College	2,803	
	AVC, Calgary	1,131	
	Olds Agricultural College	364	204
	Nursing Orderly School	22	
	Nursing Aide School	331	
	Hospital Based Nursing	630	
	Apprenticeship[3]	2,810	
	Other Extension[4]		18,488
	TOTAL	10,415	21,771
RED DEER	Red Deer College	761	124
	AVC, Hobbema	44	
	Canadian Union College*	93	
	Hospital Based Nursing	34	
	Apprenticeship[3]	600	
	Other Extension[4]		4,531
	TOTAL	1,532	4,655
GRANDE PRAIRIE	Grande Prairie College	519	122
	AVC, Grouard	158	
	Apprenticeship[3]	305	
	Other Extension[4]		2,241
	TOTAL	982	2,363
VERMILION	Vermilion Ag. College	169	333
	Apprenticeship[3]	250	
	Other Extension[4]		1,601
	TOTAL	419	1,934

Continued...

Table A-24 (continued)

Regional College Enrolments, 1970-71

Region	College or College Program[1]	Enrolments[2] Full- Plus Part-time	Extension
FAIRVIEW	Fairview Ag. College	109	124
	Apprenticeship[3]	194	
	Other Extension[4]		1,380
	TOTAL	303	1,504

NOTE:

	Edmonton	Med. Hat	Lethbridge	Calgary	Red Deer	Grande Prairie	Vermilion	Fairview	TOTAL
Regional Populations (x 1000)	732	47	112	494	106	54	44	33	1,623
%-Ages of Total	45.2	2.9	6.9	30.4	6.5	3.3	2.7	2.1	100
Apprenticeship Enrolments by Regions	4,178	268	638	2,810	600	305	250	194	9,243
Extension Enrolments by Regions	32,370	2,077	4,942	21,771	4,655	2,363	1,934	1,504	71,616

Table A-25

Distribution of Selected Age Groups of Alberta Population by Major Task in 1969-70
Number (000's), Sex, and as Percent of Total Population ( )

Age Group Category		Task			
		Education	Employment	Unemployment	Domestic-Retired
Childhood	K	4.6 (0.29)			
0 - 5 yrs.	P.S.	11.3 (0.71)			180.0 (11.35)
n = 195.9	Total	15.9 (1.00)			180.0 (11.35)
Education	Public	401.9 (25.42)	3.8 (0.24)	1.9 (0.01)	-
6 - 17 yrs.	Priv. & Spec.	9.6 (0.60)	1.4 (0.08)	1.1 (0.01)	1.1 (0.01)
n = 422.4	Higher	1.4 (0.08)			
	Total	412.9 (26.10)	5.2 (0.32)	3.0 (0.02)	1.1 (0.01)
H. Ed/Work	M	26.2 (1.65)	61.8 (3.91)	2.4 (0.06)	2.4 (0.16)
18-24 yrs.	F	15.0 (0.95)	46.4 (2.93)	1.4 (0.08)	30.2 (1.90)
n = 185.7	Total	41.2 (2.61)	108.2 (6.84)	3.8 (0.24)	32.6 (2.06)
Work	M	8.8 (0.06)	270.3 (17.10)	10.8 (0.68)	13.0 (0.82)
25-59 yrs.	F	3.5 (0.02)	121.9 (7.71)	4.8 (0.33)	174.6 (11.04)
n = 609.7	Total	12.3 (0.08)	392.2 (24.81)	15.6 (1.01)	187.6 (11.87)
Wk/Retire	M	-	25.2 (1.59)	1.0 (0.06)	58.0 (3.67)
60+	F	-	12.6 (0.80)	0.5 (0.03)	77.1 (4.85)
n = 167.9	Total	-	37.8 (2.39	1.5 (0.09)	135.4 (8.56)

Total Population, 1970: 1,581,000 (.01 = 158 persons)

Prepared July 14, 1971; revised July 19, 1971 and documented by N. Chamchuk, Executive Assistant, Alberta Colleges Commission.

APPENDIX B

Table B-1

Alberta Indian Population by Agency and Band

		College		POPULATIONS				
Agency	Band	Region	C.D.	1966	1966*	1967	1968	1969
772 Blackfoot/ Stony/ Sarcee	02 Blackfoot	Cal	5	1933	1821	2235		2351
	03 Chinquay (781 02)**	Cal	9	387	385	394		437
	04 Sarcee (781 03)	Cal	6	408	352	424		466
	05 Sunchild (781 04)	RDr	8	252	238	262		288
	06 O'Chiese (781 05)	RDr	8	279	226	284		311
	07 Bearspaw (781 06)	Cal	9	583	578	597		608
	08 Wesley (781 07)	RDr	9	491	480	511		567
773 Blood/ Peigan	02 Blood	LBr	3	3863	3551	3999		4260
	03 Peigan	LBr	3	1519	1467	1334		1414
774 Edmonton/ Hobbema	02 Alexis	Edm	13	447	414	457		489
	03 Alexander	Edm	11	441	397	456		497
	05 Louis Bull	RDr	8	400	379	419		436
	06 Enoch	Edm	11	418	341	437		471
	07 Paul's	Edm	11	523	463	543		571
	08 Montana	RDr	8	218	200	229		255
	10 Ermineskin	RDr	8	834	728	868		911
	11 Ermineskin	RDr	8	1	0	1		1
	16 Samson	RDr	8	1585	1451	1644		1801
	GL (General List)	RDr	8	3	0	3		5

continued --

*Number of persons in each band living on a reserve in 1966. All other figures represent total numbers registered in a band.

**Prior to 1969, these agency and band numbers were used.

Source: Department of Indian Affairs, Government of Canada.

Table B-1 continued

Agency	Band	College Region	C.D.	1966	1966*	1967	1968	1969
775 Fort Vermilion	02 Little Red River	Fvw	15	743	481	791		870
	03 Slaves of Upper Hay	Fvw	15	909	849	950		1010
	04 Tall Cree	Fvw	15	180	61	188		203
	05 Boyer River	Fvw	15	249	180	253		263
777 Lesser Slave Lake	02 Driftpile	Edm	15	441	320	473		493
	03 Sucker Creek	GrP	15	411	285	425		455
	05 Swan River	Edm	15	135	92	139		138
	06 Sawridge	Edm	15	39	34	39		39
	07 Duncans	GrP	15	39	38	43		44
	08 Horse Lake	GrP	15	106	80	103		105
	11 Sturgeon Lake	GrP	15	569	536	590		620
	12 Whitefish Lake	Edm	15	385	294	416		444
	17 Bigstone	Edm	15	1144	616	1194		1289
	23 Lubican Lake	Edm	15	49	3	52		52
	24 Gouard	GrP	15	43	12	44		48
	GL (General List)			1	0	1		0
779 Saddle Lake/ Athabasca	02 Cree	Edm	12	662	0	675		726
	03 Saddle Lake	Edm	12	2169	1879	2279		2456
	04 Chipewyan	Edm	12	221	83	230		240
	06 Cold Lake	Edm	12	782	704	808		840
	07 Frog Lake	Edm	12	498	467	532		580
	08 Kehewin	Edm	12	425	385	446		471
	09 Beaver Lake	Edm	12	182	131	185		199
	10 McKay	Edm	12	161	0	166		173
	11 McMurray	Edm	12	87	12	90		90
	12 Heart Lake	Edm	12	59	4	63		69
	13 Janvier	Edm	12	158	121	163		178
TOTAL	ALL ALBERTA			25,432	21,138	26,440	27,322	28,234

Table B-2

Alberta Indian Population by Census Division (1966): Comparison of D.B.S. and Department of Indian Affairs Data

Census Division	D.B.S.	Dept. I.A.	
		On Reserve	Total
#3	4,102	5,018	5,382
5	1,714	1,821	1,933
6	771	352	408
8	1,736	3,222	3,572
9	1,376	1,443	1,461
11	2,555	1,201	1,382
12	3,704	3,786	5,404
13	353	414	447
15	3,878	3,881	5,443
ALL Alberta	20,189	21,138	25,432

Table B-3

Alberta Indian Population By
College Region and Census Division

College Region	C.D.	Populations*			
		1961	1966	1970	1981
Edmonton	11	1,120	1,382	1,591	2,690
	12	4,372	5,404	6,226	10,552
	13	376	447	503	797
	15	1,756	2,193	2,541	4,375
	TOTAL	7,624	9,426	10,861	18,414
Lethbridge	3 TOTAL	4,894	5,382	5,770	7,814
Calgary	5	1,235	1,933	2,489	5,415
	6	311	408	485	891
	9	845	970	1,070	1,595
	TOTAL	2,391	3,311	4,044	7,901
Red Deer	8	2,844	3,572	4,152	7,204
	9	364	491	592	1,124
	TOTAL	3,208	4,063	4,744	8,328
Grande Prairie	15 TOTAL	997	1,169	1,306	2,027
Fairview	15 TOTAL	1,631	2,081	2,433	4,288
PROVINCIAL TOTALS		20,745	25,432	29,158	48,772

*All figures except for 1966 are projections of available data, which are given for 1966, 1967, 1969 in Table B-1. The projection methodology is described in Figure B-1.

Table B-4

Proration of Indian Populations in Census Divisions Shared by Two or More College Regions

Census Division	College Regions	Regional Ratios[1]	Prorated Indian Populations 1961	Prorated Indian Populations 1966
9	Red Deer	34 %	490	468
	Calgary	66 %	951	908
		100 %	1,441	1,376
15	Edmonton	40 %	1,209	1,551
	Grande Prairie	22 %	665	853
	Fairview	38 %	1,148	1,474
		100 %[2]	3,022	2,878

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[1] Proportions were calculated from data in Tables B-1 and B-2 which provided detailed geographical breakdowns of Indian populations as recorded by the Danada Department of Indian Affairs. For example, in 1966, the Department found that 491 of 1,461 persons in C.D. #9 were located within the geographical boundaries of the Red Deer College Regions; 907 were in the Calgary region. [Note that the 1,461 total does not agree with the D.B.S. determined number of Indians--1,367--in C.D. #9; this is due to differing criteria for counting. D.B.S. mainly depends upon the father's ancestory whereas I.A. depends upon whether grants are being received].

[2] D.B.S. catalogue 92-606 (1966).